SAMSUNG

FREESTANDING GAS RANGES

BASIC:	NX583G0VBSR
MODELS AND MODEL CODES :	NX58F5500SS NX58F5500SB NX58F5500SW NX58F5300SS
VERSION :	VER.00, VER.01

SERVICE Manual

GAS RANGES

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2. Specifications
3. Disassembly and Reassembly
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Refer to the service manual in the Global Service Partner Network (GSPN).
See rear cover for more information.

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1. Precaution

1-1 Forward

This SAMSUNG Service Manual, "Freestanding Gas Ranges," provides the technician with information on the operation and service of freestanding self-cleaning gas ranges. It is to be used as a training service manual. For specific information on the model being serviced, refer to the user manual or tech sheet provided with the gas range.

1-2 Safety Precautions

- Repairs of the appliance should be carried out by a licensed technician only. Incorrect repairs may result in dangerous situations. If you need repairs, contact an SAMSUNG Service Center or your dealer.
- If the power cord is defective, it must be replaced by a licensed technician with a UL-listed range cord.
- If the gas supply is damaged or defective, it must be replaced by a licensed technician or gas supplier.
- Electrical leads and cables should not be allowed to touch the oven.
- Rating plate is located on the left side of the opening for the warming drawer or storage drawer.
- The gas and electrical supplies to the appliance should be turned off and/or disconnected when the range is being serviced or repaired.

WARNING

- To avoid risk of death or severe personal injury from electrical shock, disconnect power before working on/servicing the appliance.
- To avoid risk of death, severe personal injury, or property damage from fire or explosion, turn off the gas supply before working on/servicing the appliance. **IF YOU SMELL GAS:**
  1. **DO NOT** light a match, candle, or cigarette.
  2. **DO NOT** turn on any gas or electric appliances.
  3. **DO NOT** touch any electrical switches.
  4. **DO NOT** use any type of phone in the building.
  5. Clear the room, building, or area of all occupants.
  6. Immediately call the gas supplier from a phone outside of the building. Follow the gas supplier's instructions.
  7. If you cannot reach the gas supplier, call the fire department.
- To avoid risk of death, severe personal injury, or property damage from fire or explosion, do not wear loose-fitting, or hanging garments near an open flame during operation and/or servicing the appliance.
- When the oven operates, the interior parts will be very hot.

SAMSUNG Electronics assumes no responsibility for any repairs made on our products by anyone other than licensed technicians.

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1-3 Important Safety Instructions

Read and follow all instructions before using or servicing the range to prevent death, personal injury, fire, explosion, and/or property damage. This guide does not cover every possible condition that may occur. For further assistance, contact a licensed technician or the manufacturer.

All electrical and gas equipment and their moving parts can be dangerous. Please read the important safety information on the appliance and in this manual. The information must be followed to minimize the risk of death, personal injury, and/or property damage.

This is the safety alert symbol. It alerts you of potential hazards that can kill or injure you or others. The following safety messages explain the potential hazards:

DANGER

Hazardous situation that will result in death and/ or serious personal injury.

WARNING

Hazardous situation that could result in death, serious personal injury, and/or property damage.

CAUTION

Hazardous situation that may result in moderate personal injury, and/or property damage.

- Be sure your appliance is properly installed and grounded by a licensed technician.
- Do not repair or replace any part of the appliance unless specifically recommended in the manual. All other servicing should be referred to a licensed technician.
- Always disconnect power to the appliance before servicing by turning off the circuit breaker or removing the fuse.
- Always turn off the main gas supply to this appliance before servicing by closing the gas supply valve to this appliance.
- Always check gas fittings and components for leaks before servicing the appliance. If a leak is detected, shut off the gas supply and notify a licensed technician and/or gas supplier.

WARNING

Tip-Over Hazard

A child or adult can tip the range and be killed.

Install anti-tip device to range and/or structure per installation instructions.

Engage the range to the anti-tip device installed to the structure.

Re-engage anti-tip device if range is moved.

Failure to follow these instructions can result in death or serious burns to children or adults.

To reduce the risk of tipping the range, the range must be secured by a properly installed anti-tip device. To check if the bracket is installed properly:

- Warming drawer: Grasp the top rear edge of the range and carefully attempt to tilt it forward. Verify that the anti-tip device is engaged.
- Storage drawer: Remove drawer and verify leveling leg is inserted into and fully secured by the anti-tip device.

Refer to the installation manual for proper anti-tip bracket installation.

- Do not step, lean, or sit on the doors of the range. This can cause the range to tip, resulting in burns or serious injuries.

WARNING

- **DO NOT TOUCH SURFACE BURNERS, SURFACE BURNER GRATES, OVEN BURNERS, INTERIOR SURFACES OF OVEN, OR WARMING DRAWER HEATING ELEMENT** – Burners, heating element, and surfaces may be hot even though they are dark in color. Interior surfaces of an oven become hot enough to cause burns. During and after use, do not touch or let clothing or other flammable materials contact burners, heating element, grates, or interior surfaces of oven until they have had sufficient time to cool. Other surfaces of the appliance may become hot enough to cause burns. Among these surfaces are oven vent openings and surfaces near these openings, oven doors, and windows of oven doors.

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CAUTION

Do not store items of interest to children in cabinets above a range or on the backguard of a range – Children climbing on the range to reach items could be seriously injured.

- Do Not Leave Children Alone – Children should not be left alone or unattended in area where appliance is in use. They should never be allowed to sit or stand on any part of the appliance.
- Never Use Your Appliance for Warming or Heating the Room.
- Storage in or on Appliance – Flammable materials should not be stored in an oven or near surface units. Be sure all packing materials are removed from the appliance before operating it. Keep plastics, clothes, and paper away from parts of the appliance that may become hot.
- Wear Proper Apparel – Loose-fitting or hanging garments should never be worn while using the appliance.
- Do Not Use Water on Grease Fires – Turn off oven to avoid spreading the flame. Smother the fire or flame by closing the door or using baking soda or a dry-chemical or foam-type extinguisher.
- Use Only Dry Pot Holders – Moist or damp pot holders on hot surfaces may result in burns from steam. Do not let pot holder touch hot heating elements. Do not use a towel or other bulky cloth.

WARNING

SURFACES

- **DO NOT TOUCH SURFACE BURNERS OR AREAS NEAR BURNERS** – Surface burners may still be hot after they have been turned off. Areas near surface burners may become hot enough to cause burns. During and after use, do not touch or let clothing or other flammable materials contact surface burners or areas near burners until they have had sufficient time to cool. Among these areas are the cooktop, surface burner grates, and surfaces close to the cooktop.

WARNING

To avoid risk of death or personal injury from electrical shock, make sure your range has been properly grounded and always disconnect it from the main power supply before any servicing.

SURFACE BURNERS

- **Use Proper Pan Size** – This appliance is equipped with one or more surface burners of different sizes. Select utensils having flat bottoms large enough to cover the surface burner flames. The use of undersized utensils will expose a portion of the surface burner flames to direct contact and may result in ignition of clothing. Proper relationship of utensil to burner will also improve efficiency.
- **Never Leave Surface Burners Unattended at High Heat Settings** – Boilovers could ignite or extinguish the burner flames. Both conditions create an explosion and/or fire hazard.
- **Protective Liners** – Do not use aluminum foil to line cooktop surface or oven bottoms, except as suggested in the manual. Improper installation of these liners may result in a risk of electric shock, fire, or burner damage.
- **Glazed Cooking Utensils** – Only certain types of glass, glass/ceramic, ceramic, earthenware, or other glazed utensils are suitable for range-top service without breaking due to the sudden change in temperature.
- **Utensil Handles Should Be Turned Inward and Not Extend Over Adjacent Surface Burners** – To reduce the risk of burns, ignition of flammable materials, and spillage due to unintentional contact with the utensil, the handle of a utensil should be positioned so that it is turned inward and does not extend over adjacent surface burners.
- **Surface Burner Components** – The burners, burner caps, and burner cups should always be cleaned by hand. They are not dishwasher-safe. The orifices should always be checked for dirt and debris whenever the burner cups are cleaned.
- Be sure you know which control knob operates each surface burner. Make sure you turned on the correct surface burner.

COOKTOP COOKING SURFACES

- **Clean Cooktop With Caution** – If a wet sponge or cloth is used to wipe spills on a hot cooking area, be careful to avoid steam burn. Some cleaners can produce noxious fumes if applied to a hot surface.
- Clean cooktop surface with nonabrasive cleaner on painted metal surfaces.

VENTILATING HOODS:

- **Clean Ventilating Hoods Frequently** – Grease should not be allowed to accumulate on hood or filter.
- **When flaming foods under the hood, turn the fan on.**

DEEP-FAT FRYERS:

- Use extreme caution when moving the grease kettle or disposing of hot grease.

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SELF-CLEAN OVENS

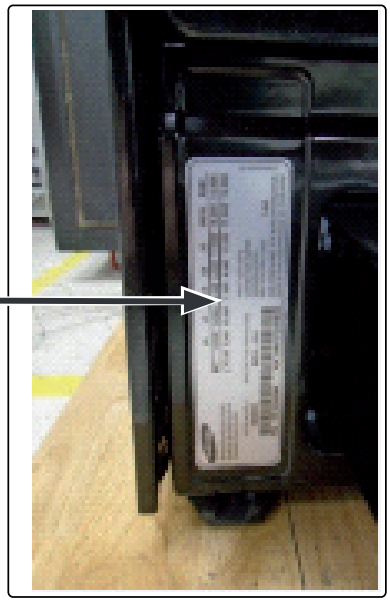
CAUTION

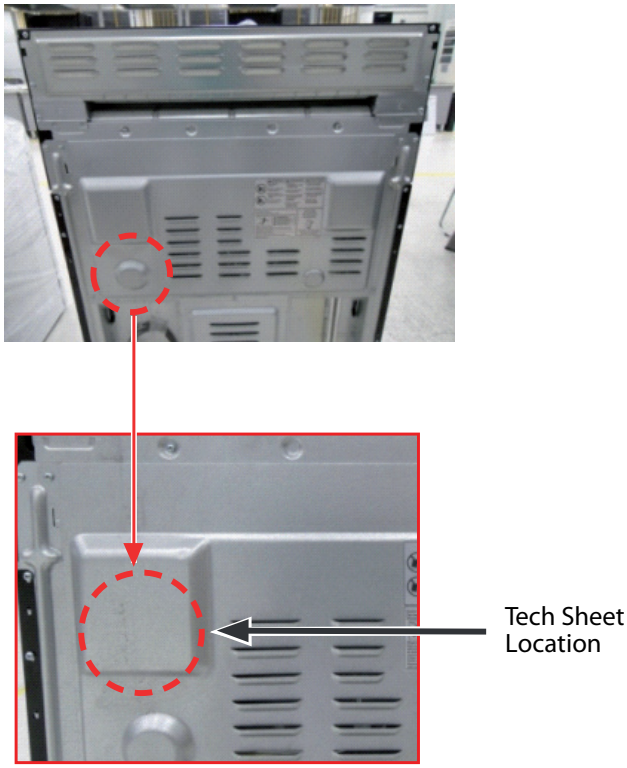
- BEFORE CLEANING, REMOVE BROILER PAN, OVEN RACKS, AND UTENSILS.
- WIPE EXCESS SPILLS FROM OVEN INTERIOR.
- SEE USER INSTRUCTIONS.

- **Do Not Clean Door Gasket** – The door gasket is essential for a good seal. Care should be taken not to rub, damage, or move the gasket.
- **Do Not Use Oven Cleaners** – No commercial oven cleaner or oven liner protective coating of any kind should be used in or around any part of the oven.
- **Never keep pet birds in the kitchen** – The health of birds is extremely sensitive to the fumes released during an oven self-clean cycle. Fumes may be harmful or fatal to birds. Move birds to a well-ventilated room.
- **Important Instruction** – In the event the self-clean mode "F" code goes on or three long beeps sound, the oven is malfunctioning in the self-clean mode. Turn off or disconnect appliance from electrical and gas supplies and have the appliance serviced by a licensed technician.
- **Use Care When Opening Door** – Let hot air or steam escape before you remove or replace food in the oven.
- **Do Not Heat Unopened Food Containers** – Buildup of pressure may cause container to burst and result in injury.
- **Keep Oven Vent Ducts Unobstructed** – The oven vent is located above the left-rear surface unit. This area could become hot during oven use. Never block this vent and never place plastic or heat-sensitive items on vent.
- **Placement of Oven Racks** – Always place oven racks in desired location while oven is cool. If rack must be moved while oven is hot, do not let pot holder contact a hot oven burner or oven bottom.

1-4 Model and Serial Number Label and Tech Sheet Locations

These models have Model/Serial Number labels and Tech Sheets located as shown below.





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2. Specifications

2-1 Features

Features

Five Open-Port Surface Burners
- Simplest design promotes serviceability and cleanability.

BTU Ratings

NX58F5500XX	NG	LP
Right Front	17,000	12,500
Right Rear	5,000	4,000
Center Oval	9,500	7,500
Left Rear	9,500	7,500
Left Front	12,000	10,000

NX58F5300SS	NG	LP
Right Front	16,000	12,500
Right Rear	5,000	4,000
Center Round	9,500	7,500
Left Rear	9,500	7,500
Left Front	12,000	10,000

Membrane Control Panel and Digital Display
- All oven features and functions are controlled and monitored by this easy-to-use control panel.

Full-Width, Heavy-Duty Grates
- 3-piece grates fit into cooktop Opening and completely cover the cooktop from edge to edge to enhance usability.

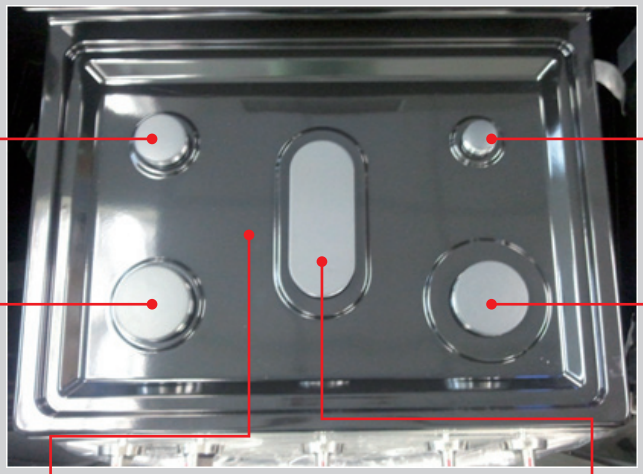
Surface Burner Control Knobs
- Front-top location provides easy access to enhance usability and safety.

Large Capacity Oven
- Provides cooking ease and necessary space for all recipes and meal items.

BTU Ratings

ALL MODELS-	NG	LP
Broil Burner (Upper)	13,500	11,500
Bake Burner (Lower)	18,000	15,000

Storage Drawer
- Convenient, front-access drawer for storage of cooking utensils.

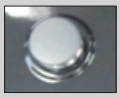


Semi-rapid burner [Left-Rear]
- NG : 9,500 BTU
- LP : 7,500 BTU

Auxiliary burner [Right-Rear]
- NG : 5,000 BTU
- LP : 4,000 BTU

Rapid burner [Left-Front]
- NG : 12,000 BTU
- LP : 10,000 BTU

Power burner [Right-Front]
- NG : 17,000 BTU
- LP : 12,500 BTU



Center Round [NX58F5300SS]
- NG : 9,500 BTU
- LP : 7,500 BTU

Center Oval [NX58F5500XX]
- NG : 9,500 BTU
- LP : 7,500 BTU

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2. Specifications

2-2 Table of Specifications

Items		BASIC MODEL	NEW MODEL			
		NX583G0VBSR	NX58F5500SS	NX58F5500SB	NX58F5500SW	NX58F5300SS
Range Type		Freestanding Gas	Freestanding Gas			
Range Color		Black and Stainless Steel	Black and Stainless Steel	Black	White	Black and Stainless Steel
Overall Dimensions	Width	30 in. (76.2cm)	30 in. (76.2cm)			
	Height	45.8 in . (116.2cm)	45.8 in . (116.2cm)			
	Depth	23.7 in. (60.2cm)	23.7 in. (60.2cm)			
Controls	Cooktop	Front-Top Control Knobs	Front-Top Control Knobs			
	Oven	SoftTouch	SoftTouch			
	Display	2-Color LED	1-Color LED			
	Digital Electronic Clock	Yes	Yes			
	Electronic Door Lock	Yes	Yes			
	Audible Preheat Signal	Yes	Yes			
Cooktop	Surface Burner Type	Open-Port	Open-Port			
	# of Surface Burners	5	5			
	Burner Ratings – BTUs	NG / LP	NG / LP	NG / LP		
	Right Front	17,000 / 12,500	17,000 / 12,500	16,000 / 12,500		
	Right Rear	5,000 / 4,000	5,000 / 4,000	5,000 / 4,000		
	Left Front	12,000 / 10,000	12,000 / 10,000	12,000 / 10,000		
	Left Rear	9,500 / 7,500	9,500 / 7,500	9,500 / 7,500		
	Center	9,500 / 7,500	9,500 / 7,500	9,500 / 7,500		
Oven	Capacity	5.8 cu.ft	5.8 cu.ft			
	# of Oven Burners	2	2			
	Upper Burner Rating - BTUs	NG / LP	NG / LP			
	Lower Burner Rating - BTUs	13,500 / 11,500	13,500 / 11,500			
		18,000 / 15,000	18,000 / 15,000			
	Convection Fan System	Yes	NO			
	# of Racks	2	2			
	Oven Light	Yes	Yes			
	Self-Cleaning	Yes	Yes			
	Interior Oven Dimensions (Width x Height x Depth)	25 x 21.125 x 19 in (635 x 536 x 481)	25 x 21.125 x 19 in (635 x 536 x 481)			
Drawer	Type	Storage	Storage			
	Electric Warming Element	No	No			
Range Weight, Net		187 Lbs (85Kg)	187 Lbs. (85Kg)			
Required Electrical Supply		120-V, 60-Hz, 15- or 20-amp AC	120-V, 60-Hz, 15- or 20-amp AC			
Required Gas Supply	Natural Gas (NG)	5–13 in. WC	5–13 in. WC			
	Liquid Propane (LP)	10-13 in. WC	10-13 in. WC			

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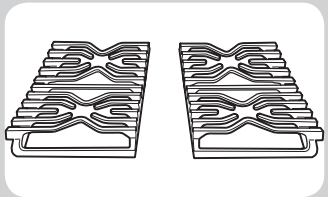
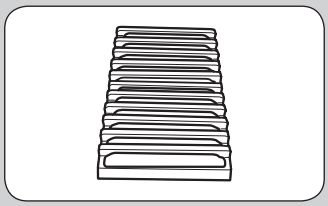
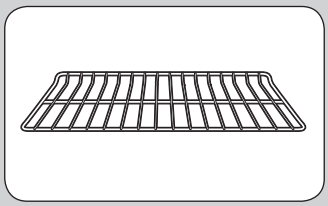
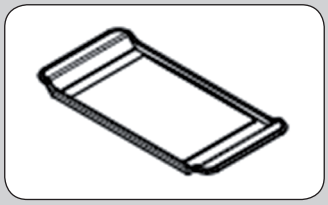
2-3 Accessories

Item	Description	Code No.	Quantity
	Assy-Grate Side	DG94-00468B	2
	Assy-Grate Center	DG94-00469B	1
	Rack-Flat	DG75-01001C	2
	Plate Griddle	DG61-00563A	1

The griddle is only provided for the NX58F5500SS, NX58F5500SB, NX58F5500SW model.

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3. Disassembly and Reassembly

3-1 Tool for assembly and disassembly

Item	How to use	Pictures
Screw driver	Use for assembly and disassembly of all screws	
Tubing Wrench	Use for assembly and disassembly of tubing to the burner cup	
7mm Vox Driver	Use for assembly and disassembly of injector nozzles. [Cooktop / Broil / Bake burner]	

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3-2 Removing the Rear Cover Panels

WARNING

ELECTRICAL SHOCK HAZARD

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.

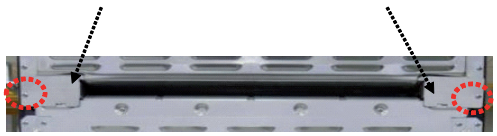
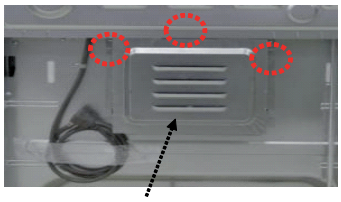
WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

Shut off gas supply to the range before servicing. Check all gas lines and fittings for leaks before operating the range. Replace all panels before operating range. Failure to do so can result in death or personal injury from explosion, fire, or asphyxiation.

CAUTION

When you work on the gas range, be careful when handling sheet metal parts. Sharp edges may be present, and you can cut yourself if you are not careful.

Parts	Explanation Photo	Explanation
Cover-Wire LT/ RT		**1.** Turn off the electrical supply going to the range. **2.** Shut off the gas shut-off valve in the gas supply line to the range. **3.** Pull the range away from the wall so that you can access the rear panel. **4.** Remove 2 screws at the Cover Wire LT/RT and pull out the cover
Cover-Back Guard Wire		**5.** Remove 2screws at the cover and pull out the cover from the upper back of the range
Cover-Convection		**6.** Remove 3screws at the cover and pull out the cover from the range.

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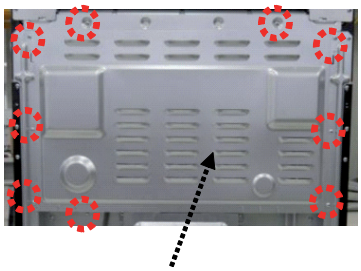
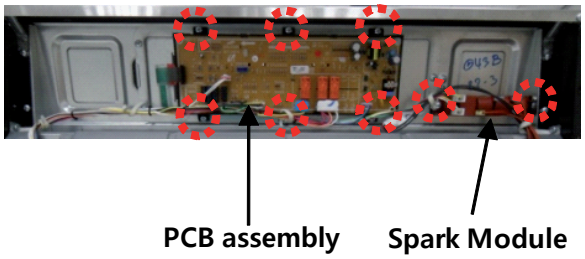
3-2 Removing the Rear Cover Panels (cont.)

Parts	Explanation Photo	Explanation
Cover-Back Main Wire		**7.** Remove 9 screws and pull out the cover from the middle back of the range
PCB Assembly & Spark Module		**8.** Remove screws of PCB assembly and separate PCB assembly. (When you check PCB, check the proper PCB in default mode and check main PCB.) **9.** Disconnect the wires to the spark module to remove it. **10.** Remove 2 screws and the spark module from the back of the range. **11.** Disconnect the wire connectors from the terminal on the spark module. **12.** When service is complete, replace the five cover panels on the back of the range and secure each with the appropriate screws. **13.** Replace the PCB ASSEMBLY and the spark module. **14.** Reconnect the gas supply line to the range, if removed. Open the main gas shut-off valve and check for gas leaks. **15.** Plug in the range and/or turn on the electrical supply to the range. **16.** Push the range back in place, making sure to engage the anti-tip bracket on the left-rear leveling leg.

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3-3 Removing the Assy-Frame Cooktop

WARNING

ELECTRICAL SHOCK HAZARD

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.

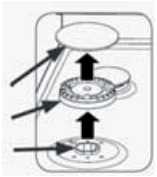
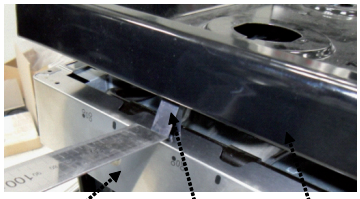
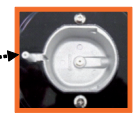
WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

Shut off gas supply to the range before servicing. Check all gas lines and fittings for leaks before operating the range. Replace all panels before operating range. Failure to do so can result in death or personal injury from explosion, fire, or asphyxiation.

CAUTION

When you work on the gas range, be careful when handling sheet metal parts. Sharp edges may be present, and you can cut yourself if you are not careful.

Parts	Explanation Photo	Explanation
Assy-Frame Cooktop	ASSY GRATE (2 SIDE / 1 CENTER)  BURNER CAP BURNER HEAD BURNER CUP	**1.** Turn off the electrical supply going to the range. **2.** Shut off the gas shut-off valve in the gas supply line to the range. **3.** Lift off the three grates. **4.** Lift off the 5 burner caps and the 5 burner heads from the burner cups. **5.** Remove screws of the 5 burner cups.
Assy-Frame Cooktop	 CHASSIS MANIFOLD PANEL SPRING COOKTOP FRAME COOKTOP ELECTRODE 	**6.** Push the 2 spring located between the frame cooktop and the chassis manifold panel with a thin iron plate. Knobs should be removed prior to disassembling the cooktop frame and take notice that Chassis-Manifold Panel is not damaged during the operation. **7.** Push the cups down below the surface of the frame cooktop. **NOTE:** Make sure the electrodes are below openings in the cooktop to prevent interference and damage during removal.

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3-4 Removing the Chassis Manifold Panel, Knob, Switch Ignition

WARNING

ELECTRICAL SHOCK HAZARD

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.

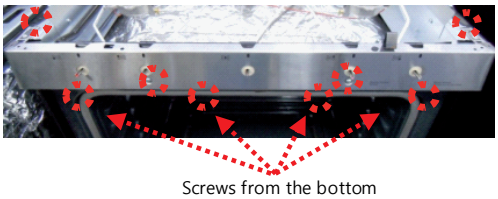
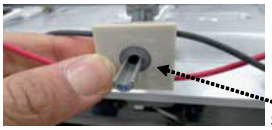
WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

Shut off gas supply to the range before servicing. Check all gas lines and fittings for leaks before operating the range. Replace all panels before operating range. Failure to do so can result in death or personal injury from explosion, fire, or asphyxiation.

CAUTION

When you work on the gas range, be careful when handling sheet metal parts. Sharp edges may be present, and you can cut yourself if you are not careful.

Parts	Explanation Photo	Explanation
Knob	Pull the control knob straight off	**1.** Turn off the electrical supply going to the range. **2.** Shut off the gas shut-off valve in the gas supply line to the range. **3.** Open the door or Remove it. **4.** Pull burner control knobs straight off to remove them from the valve shafts.
Chassis Manifold Panel	 Screws from the bottom	**5.** Remove 2 screws from the top, 2 screws from the front and 4 screws from the bottom of the chassis manifold panel. **6.** Remove the chassis manifold panel from the front of the range.
Switch Ignition	 Switch ignition Connector	**7.** Place a finger behind each side of the switch ignition and pull it straight out to release it from the control shaft. Repeat for each switch. **8.** Disconnect the wires at the connectors.

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3-5 Removing the Valve Cooktop

WARNING

ELECTRICAL SHOCK HAZARD

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.

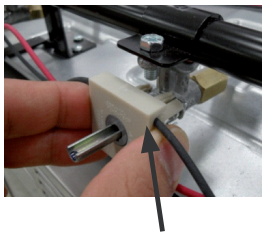
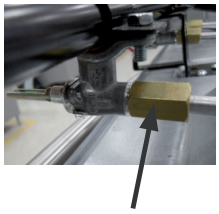
WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

Shut off gas supply to the range before servicing. Check all gas lines and fittings for leaks before operating the range. Replace all panels before operating range. Failure to do so can result in death or personal injury from explosion, fire, or asphyxiation.

CAUTION

When you work on the gas range, be careful when handling sheet metal parts. Sharp edges may be present, and you can cut yourself if you are not careful.

Parts	Explanation Photo	Explanation
Switch Ignition	 SWITCH IGNITION	**1.** Turn off the electrical supply going to the range. **2.** Shut off the gas shut-off valve in the gas supply line to the range. **3.** Remove the ASSY FRAME COOKTOP, knob and the chassis manifold panel. **4.** Place a finger behind each side of the switch ignition and pull it straight out to release it from the control shaft. Repeat for each switch.
Fitting (Gas line)	 FITTING (GAS LINE)	**5.** Using a tubing wrench and a channel-lock wrench, disconnect the gas lines from the valve cooktop. Do not bend or crimp gas lines during removal.
Valve Cooktop	ASSY VALVE-MANIFOLD COATING	**6.** Remove 2 screws from ASSY VALVE-MANIFOLD COATING **Note :** When assembling and disassembling the valve, the torque should be 1.5N.m. **7.** Remove the valve cooktop.

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3-6 Replacing the Burner Cup

WARNING

ELECTRICAL SHOCK HAZARD

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.

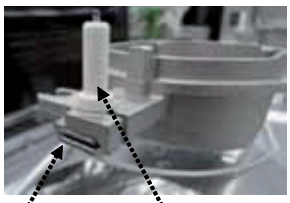
WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

Shut off gas supply to the range before servicing. Check all gas lines and fittings for leaks before operating the range. Replace all panels before operating range. Failure to do so can result in death or personal injury from explosion, fire, or asphyxiation.

CAUTION

When you work on the gas range, be careful when handling sheet metal parts. Sharp edges may be present, and you can cut yourself if you are not careful.

Parts	Explanation Photo	Explanation
Locking Clip & Electrode	 	**1.** Turn off the electrical supply going to the range. **2.** Shut off the gas shut-off valve in the gas supply line to the range. **3.** Remove the frame cooktop. **4.** Using a tubing wrench on the gas line fitting and a channel lock wrench on the burner cup base, firmly hold the cup base in place while disconnecting the gas line. **5.** To remove the electrode from the cup, squeeze the two outside edges of the clip under the electrode together while pulling to remove the locking clip. Slide the electrode and the wire from the cup. The burner cup can now be removed.

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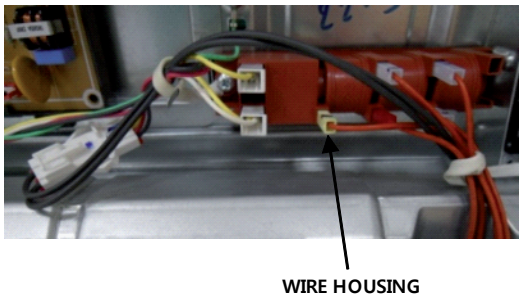
3-6 Replacing the Burner Cup (cont.)

Parts	Explanation Photo	Explanation
Burner cup		**6.** To replace the electrode, disconnect the wire connectors from the terminal on the spark module. **7.** To remove the gas orifice, place the burner cup in a vise and remove the orifice with a 9/32-inch socket wrench. **8.** When service is complete, Install the gas orifice in the new burner cup. **NOTE:** The new burner cup must be the same size as the one removed. **9.** Reconnect the electrode to the new burner cup and replace the burner cup in the reverse order

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3-7 Replacing the Assy Door Latch

WARNING

ELECTRICAL SHOCK HAZARD

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.

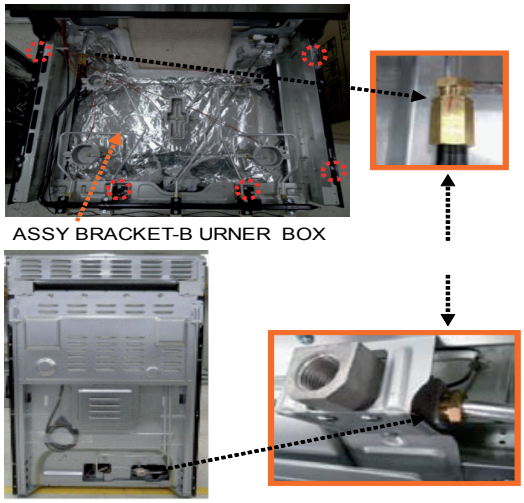
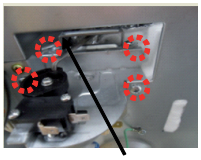
WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

Shut off gas supply to the range before servicing. Check all gas lines and fittings for leaks before operating the range. Replace all panels before operating range. Failure to do so can result in death or personal injury from explosion, fire, or asphyxiation.

CAUTION

When you work on the gas range, be careful when handling sheet metal parts. Sharp edges may be present, and you can cut yourself if you are not careful.

Parts	Explanation Photo	Explanation
Assy Tube-Manifold		**1.** Turn off the electrical supply going to the range. **2.** Shut off the gas shut-off valve in the gas supply line to the range. **3.** Remove the oven door and the cooktop. **4.** Remove the control knob and the chassis manifold panel. **5.** Remove the ASSY tube-manifold using a tubing wrench.
Assy Door Latch	ASSY Door Latch  Bracket-Latch sub	**6.** Remove 2 screws from the Bracket-Latch sub to the rear of the range. **7.** Disconnect wires of the door latch to the rear of the range and remove it. **8.** Remove 2 screws holding the Assy bracket-latch rear to the rear of the range. **9.** Remove the latch-rod from the Assy bracket-latch front. **10.** Remove 2 screws holding the Assy bracket-latch front to the front of cavity. **11.** Reverse the order to install the ASSY DOOR LATCH. **12.** Test the ASSY DOOR LATCH to make sure it is latching and unlatching properly.

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3-8 Replacing the Switch-Door Plunger

WARNING

ELECTRICAL SHOCK HAZARD

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.

WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

Shut off gas supply to the range before servicing. Check all gas lines and fittings for leaks before operating the range. Replace all panels before operating range. Failure to do so can result in death or personal injury from explosion, fire, or asphyxiation.

CAUTION

When you work on the gas range, be careful when handling sheet metal parts. Sharp edges may be present, and you can cut yourself if you are not careful.

Parts	Explanation Photo	Explanation
Switch-Door Plunger	SWITHCH-DOOR PLUNGER	**1.** Turn off the electrical supply going to the range. **2.** Shut off the gas shut-off valve in the gas supply line to the range. **3.** Open the oven door. **4.** Carefully pull out the switch door plunger switch from the upper left corner of the cavity front. Gently grasp the plunger with pliers and work from side to side while pulling. Pull out far enough to expose the wires. **5.** Note the location and mark the wires; then disconnect the wire to the switch door plunger. **6.** Replace with the switch-door plunger, reconnect the wires in their original positions, and reinstall switch in the oven frame.

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3-9 Replacing the Assy Lamp Bulb

WARNING

ELECTRICAL SHOCK HAZARD

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.

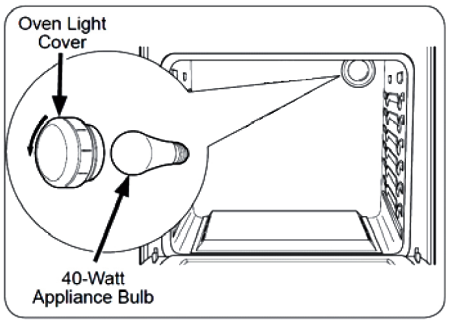
WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

Shut off gas supply to the range before servicing. Check all gas lines and fittings for leaks before operating the range. Replace all panels before operating range. Failure to do so can result in death or personal injury from explosion, fire, or asphyxiation.

CAUTION

When you work on the gas range, be careful when handling sheet metal parts. Sharp edges may be present, and you can cut yourself if you are not careful.

Parts	Explanation Photo	Explanation
Assy Lamp Bulb		**1.** Turn off the electrical supply going to the range. **2.** Shut off the gas shut-off valve in the gas supply line to the range. **3.** Remove the rear cover panel. **4.** Open the oven door and remove the racks from inside the oven. **5.** The oven lamp bulb is in the upper right-hand corner of the oven cavity. Turn oven lamp cover counterclockwise to loosen and remove the cover. **6.** Remove the oven light bulb. **7.** When service is complete, Install the bulb and light cover by turning clockwise.

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3-10 Replacing the Sensor-Thermistor

WARNING

ELECTRICAL SHOCK HAZARD

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.

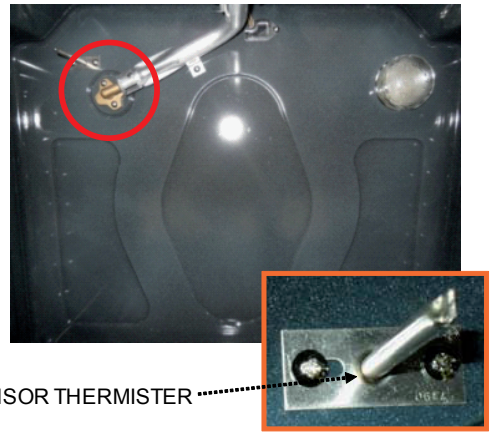
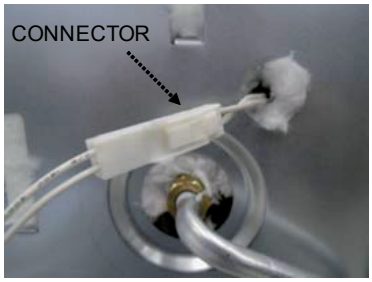
WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

Shut off gas supply to the range before servicing. Check all gas lines and fittings for leaks before operating the range. Replace all panels before operating range. Failure to do so can result in death or personal injury from explosion, fire, or asphyxiation.

CAUTION

When you work on the gas range, be careful when handling sheet metal parts. Sharp edges may be present, and you can cut yourself if you are not careful.

Parts	Explanation Photo	Explanation
Upper Oven Burner Shield and Upper Oven Burner	 	**1.** Turn off the electrical supply going to the range. **2.** Shut off the gas shut-off valve in the gas supply line to the range. **3.** Open the oven door and remove the racks from inside the oven. **4.** Disconnect connector of the sensor thermister to the rear of the range. **5.** The oven sensor thermister is in the upper left-hand corner of the oven cavity. Remove 2 screws and carefully pull the sensor wire leads until the wire connectors appear. **6.** Reverse the order to install the oven temperature sensor. **NOTE:** If you can't access the wire connectors from inside the oven, remove the rear cover panel. Mark and disconnect the two wires going to the oven sensor thermister.

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3-11 Replacing the Gasket Door

WARNING

ELECTRICAL SHOCK HAZARD

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.

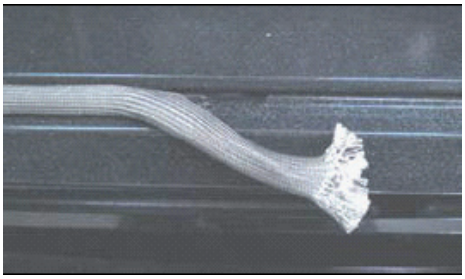
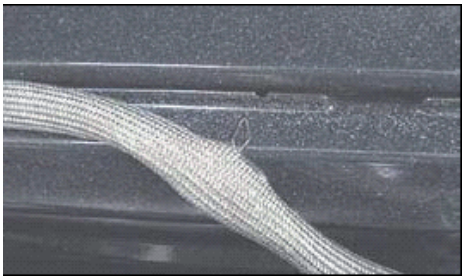
WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

Shut off gas supply to the range before servicing. Check all gas lines and fittings for leaks before operating the range. Replace all panels before operating range. Failure to do so can result in death or personal injury from explosion, fire, or asphyxiation.

CAUTION

When you work on the gas range, be careful when handling sheet metal parts. Sharp edges may be present, and you can cut yourself if you are not careful.

Parts	Explanation Photo	Explanation
Gasket Door	 	**1.** Open the oven door to its fully down position. **2.** Pull the ends of the gasket out of the liner holes. **3.** Pull the oven door gasket clips out of the holes until all of the clips are removed. **4.** When the service is complete, Insert gasket clips in each mounting hole. Push the ends of gasket in end holes in the bottom of the front oven frame. **5.** Close the oven door. **REASSEMBLY NOTE :** When you install the new gasket, make sure that all of the clips are seated in their liner holes, and that the ends of the gasket are pushed fully into their holes. Use the pointed end of a pencil to push the gasket ends into the holes.

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3-12 Removing and Replacing the Door

WARNING

ELECTRICAL SHOCK HAZARD

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.

WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

Shut off gas supply to the range before servicing. Check all gas lines and fittings for leaks before operating the range. Replace all panels before operating range. Failure to do so can result in death or personal injury from explosion, fire, or asphyxiation.

CAUTION

When you work on the gas range, be careful when handling sheet metal parts. Sharp edges may be present, and you can cut yourself if you are not careful.

Parts	Explanation Photo	Explanation
Door (Replace)	 	1. Fully open the door 2. Pull the hinge locks downward 3. Firmly grasp both side of the door at the top. 4. Close door to the door removal position, which is approximately 5 degrees. Lift door up and out until the hinge arm are clear of the slot.
Door (Removal)	 	1. Firmly grasp both sides of the door at the top position. 2. Fully open the door. (If the door will not fully open, it means that the indentation is not seated correctly in the bottom edge of the slot. Push the hinge locks up to the locked position.) 3. Close the oven door.

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3-13 Replacing the Handle-Door

WARNING

ELECTRICAL SHOCK HAZARD

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.

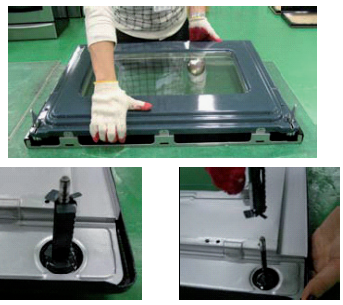
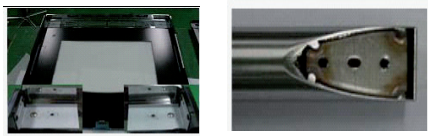
WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

Shut off gas supply to the range before servicing. Check all gas lines and fittings for leaks before operating the range. Replace all panels before operating range. Failure to do so can result in death or personal injury from explosion, fire, or asphyxiation.

CAUTION

When you work on the gas range, be careful when handling sheet metal parts. Sharp edges may be present, and you can cut yourself if you are not careful.

Parts	Explanation Photo	Explanation
Handle-Door		**1.** Remove the oven door from the range. **2.** Place the oven door on a padded work surface with the front glass facing down. **3.** Remove 3 bottom screws from the door. **4.** Remove 2 Handle-screws from the door.
		**5.** Lift the door rear assembly off the front assembly and set it aside **6.** Remove 2 spacers and 2 screws.
		**7.** Remove 2 screws to replace the Handle-Door

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3-14 Replacing the Glass-Inner

WARNING

ELECTRICAL SHOCK HAZARD

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.

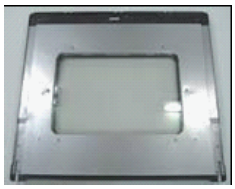
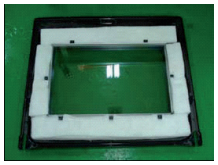
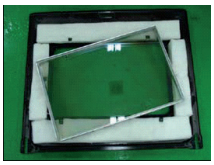
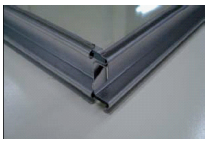
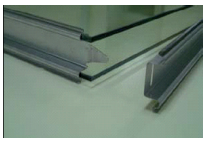
WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

Shut off gas supply to the range before servicing. Check all gas lines and fittings for leaks before operating the range. Replace all panels before operating range. Failure to do so can result in death or personal injury from explosion, fire, or asphyxiation.

CAUTION

When you work on the gas range, be careful when handling sheet metal parts. Sharp edges may be present, and you can cut yourself if you are not careful.

Parts	Explanation Photo	Explanation
Glass-Inner		**1.** Remove 6screws from rear side of door to remove 2 Hinge-Door. **2.** Remove 4screws ro remove Glass- Inner Sub Assembly **3.** Remove 7screws ro remove Baffle- Door
	 	**4.** Remove Baffle-Door and take out the Glass-Inner assembly.
	 	**5.** Unfold 2 flanges of Cover-Frame Inner Glass to taking out Glass-Inner

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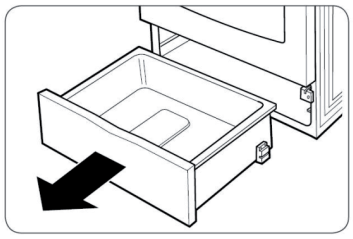
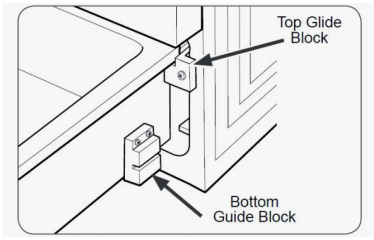
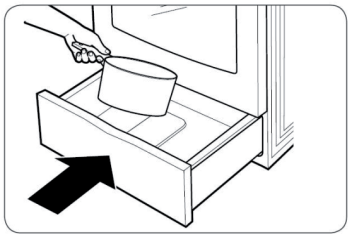
3-15 Replacing the Storage drawer

WARNING

The door is very heavy. Be careful when removing door. Do not lift door by the door handle.

Parts	Explanation Photo	Explanation
Storage drawer	  	**1.** Pull out the drawer and remove the contents. **2.** While supporting the drawer, pull it out until the 2 bottom guide blocks are exposed. Lift out the drawer from the 2 top glide blocks. **3.** To replace, position top edge of drawer on the 2 top glide blocks. To replace a glide or guide block, remove mounting screw(s) and block. **4.** Slide the drawer in until the lower drawer blocks engage with the drawer slide rails on each side of the drawer opening. Replace the contents and close the drawer.

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3-16 Replacing the Burner Broil

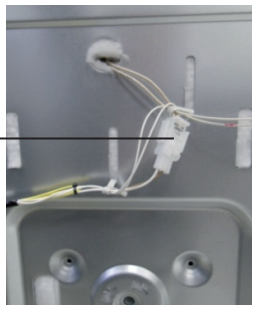
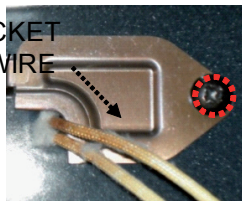
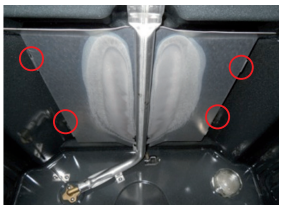
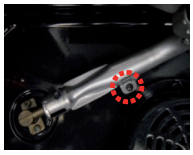
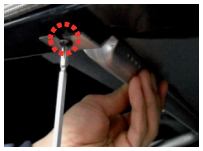
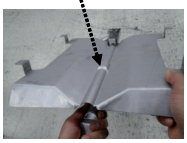
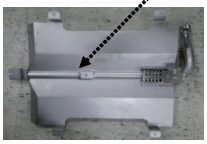
WARNING

ELECTRICAL SHOCK HAZARD

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.

CAUTION

When you work on the gas range, be careful when handling sheet metal parts. Sharp edges may be present, and you can cut yourself if you are not careful.

Parts	Explanation Photo	Explanation
Burner Broil		**1.** Turn off the electrical supply going to the range. **2.** Shut off the gas shut-off valve in the gas supply line to the range. **3.** Open the oven door and remove the racks from inside the oven. **4.** Remove Cover-back main wire to the rear of the oven. **5.** Disconnect the wires or the connector of the HSI. (Identify and mark the two wires going to HSI.)
	 	**6.** Remove 1 screw of bracket HSI-wire **7.** Remove 4 screws of bracket-broil spreader to top of oven.
	 	**8.** Support the burner-broil with one hand, remove 2 screw supporting the burner-broil to the front and the rear of the oven.
	 	**9.** Pull the upper ASSY-BURNER BROIL SPREADER to disconnect it from the holder nozzle-broil on the rear wall of the oven. **10.** Carefully remove ASSY-BURNER BROIL SPREADER. **11.** Separate the burner broil and bracket-broil spreader.

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3-17 Replacing the HOT SURFACE IGNITOR (HSI) of the BURNER BROIL, NOZZLE Broil-Burner, and HOLDER Broil-BURNER

WARNING

ELECTRICAL SHOCK HAZARD

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.

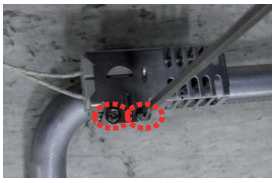
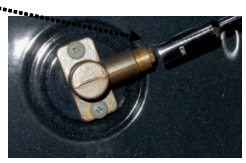
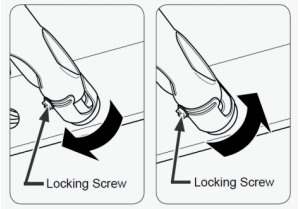
WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

Shut off gas supply to the range before servicing. Check all gas lines and fittings for leaks before operating the range. Replace all panels before operating range. Failure to do so can result in death or personal injury from explosion, fire, or asphyxiation.

CAUTION

When you work on the gas range, be careful when handling sheet metal parts. Sharp edges may be present, and you can cut yourself if you are not careful.

Parts	Explanation Photo	Explanation
Hot Surface Ignitor (HSI)		**1.** To replace the HSI of the burner broil, Remove 2 screws assembled to HSI
Nozzle Broil-Burner	Remove the gas nozzle 	**1.** To replace the nozzle broil-burner, Remove the gas nozzle with a 9/32-inch socket wrench.
Holder Broil-Burner		**1.** To remove the holder-broil burner, Remove 2 screws supporting the holder-broil burner to the rear of the oven. **2.** When the service is complete, reverse the order to install burner broil, HSI, Nozzle and Holder broil burner. **NOTE:** The oven burner flames can be adjusted by loosening the locking screw and opening or closing the air shutter at the base of the oven burner.

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3-18 Replacing the Burner Bake

WARNING

ELECTRICAL SHOCK HAZARD

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.

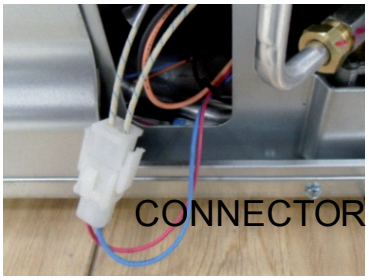
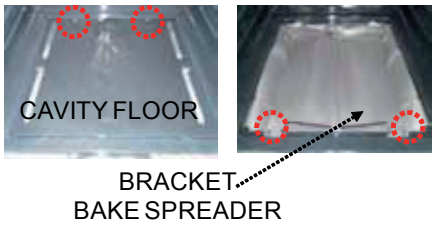
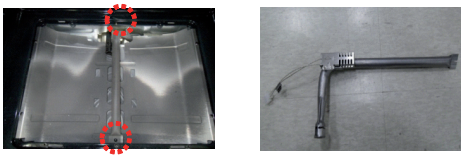
WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

Shut off gas supply to the range before servicing. Check all gas lines and fittings for leaks before operating the range. Replace all panels before operating range. Failure to do so can result in death or personal injury from explosion, fire, or asphyxiation.

CAUTION

When you work on the gas range, be careful when handling sheet metal parts. Sharp edges may be present, and you can cut yourself if you are not careful.

Parts	Explanation Photo	Explanation
Burner Bake		**1.** Turn off the electrical supply going to the range. **2.** Shut off the gas shut-off valve in the gas supply line to the range. **3.** Open the oven door and remove the racks from inside the oven. **4.** Pull on the wires or the connector until the wire connector appears from the back wall of the warming drawer opening. **5.** Disconnect the connector of HSI of the burner bake.
		**6.** Remove the two screws from the back of the cavity floor. Lift back to clear the front edge and lift out the cavity floor. **7.** Remove 2 screws from the front of the bracket bake-spreader.
		**8.** Lift front the bracket bake-spreader and lift out the bracket-bake spreader. **9.** Lift up the burner bake from the holder-bake burner on the bottom of the drawer.

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3-19 Replacing the HOT SURFACE IGNITOR (HSI) of the BURNER BAKE, NOZZLE BAKE-BURNER, and HOLDER BAKE-BURNER

WARNING

ELECTRICAL SHOCK HAZARD

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.

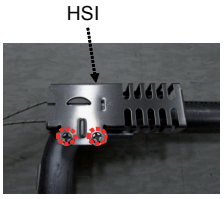
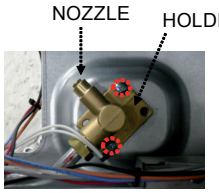
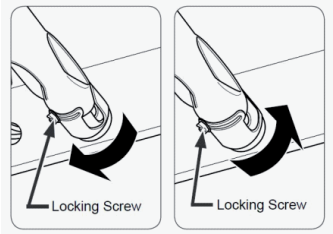
WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

Shut off gas supply to the range before servicing. Check all gas lines and fittings for leaks before operating the range. Replace all panels before operating range. Failure to do so can result in death or personal injury from explosion, fire, or asphyxiation.

CAUTION

When you work on the gas range, be careful when handling sheet metal parts. Sharp edges may be present, and you can cut yourself if you are not careful.

Parts	Explanation Photo	Explanation
Hot Surface Ignitor (HSI)		**1.** To replace the HSI of the burner bake, Remove 2 screws assembled to HSI
Nozzle Bake -Burner		**1.** To replace the nozzle bake-burner, Remove the gas orifice with a 9/32-inch socket wrench.
Holder Bake-Burner	NOTE. 	1. To remove the holder-bake burner, Remove 2 screws supporting the holder-bake burner to the rear of the oven. 2. When the service is complete, reverse the order to install Burner bake, HSI, Nozzle, Holder bake-burner. NOTE: The oven burner flames can be adjusted by loosening the locking screw and opening or closing the air shutter at the base of the oven burner.

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3-20 Replacing the Assy Valve Safety

WARNING

ELECTRICAL SHOCK HAZARD

Disconnect power before servicing the range. Replace all panels before operating range. Failure to do so can result in death or electrical shock.

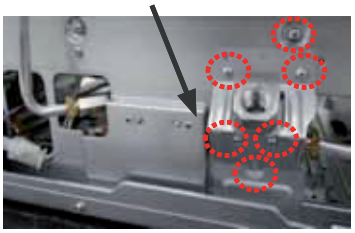
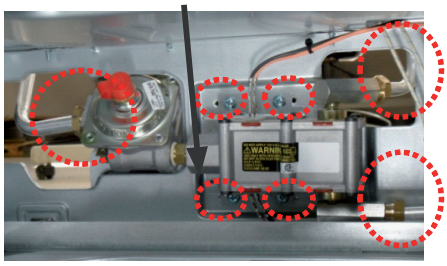
WARNING

EXPLOSION, FIRE, AND ASPHYXIATION HAZARD

Shut off gas supply to the range before servicing. Check all gas lines and fittings for leaks before operating the range. Replace all panels before operating range. Failure to do so can result in death or personal injury from explosion, fire, or asphyxiation.

CAUTION

When you work on the gas range, be careful when handling sheet metal parts. Sharp edges may be present, and you can cut yourself if you are not careful.

Parts	Explanation Photo	Explanation
Assy Valve Safety	SUPPORT REGULATOR  [Rear]	1. Turn off the electrical supply going to the range. 2. Shut off the gas shut-off valve in the gas supply line to the range. 3. Remove the regulator support bracket from the rear of the range 4. Carefully identify and mark the wires going to the ASSY VALVE SAFETY. Disconnect the 4 wires.
	ASSY VALVE SAFETY  [Front]	**WARNING** Cross-wiring the wires to the ASSY VALVE SAFETY creates an explosion hazard that can result in death, personal injury, and/or property and product damage. 5. Using a tubing wrench and a channel-lock wrench, disconnect the 3 gas lines from the ASSY VALVE SAFETY. Do not bend or crimp gas lines during removal. 6. Remove gas fittings from the ASSY VALVE SAFETY. 7. Remove 4 screws and the ASSY VALVE SAFETY from the back wall of the warming drawer opening.

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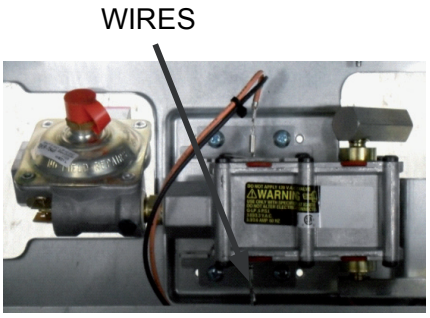
3-20 Replacing the Assy Valve Safety

Parts	Explanation Photo	Explanation
Assy Valve Safety		**8.** Install the new ASSY VALVE SAFETY from the back wall of the warming drawer with 4 screws. **9.** Reconnect gas lines to the ASSY VALVE SAFETY . **NOTE:** Check all gas lines and fittings for leaks before operation. **WARNING** Cross-wiring the wires to the gas control valve creates an explosion hazard that can result in death, personal injury, and/or property and product damage. **10.** Reconnect wire connectors in their original positions.

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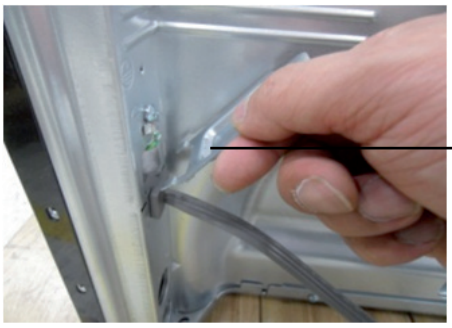
3-21 Replacing the Assy Power cord

Parts	Explanation Photo	Explanation
Assy power Cord	  COVER GROUND WIRE HOUSING	1. Turn off the electrical supply going to the range. 2. Remove a screw of cover and pull it out from the range. 3. Remove a screw of the ground wire. 4. Pull on the power cord wire. 5. Disconnect the housing of the wire and replace it.

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4. Troubleshooting

4-1 Failure Display Codes

There are two kinds of error codes. One denotes an oven temperature sensor error and the other denotes a safety error. Possible error codes during use can be checked before service.

1. Press the Clock pad.

2. Press the number pads 1, 2, 3 and 4. Make sure the Timer and Warming Drawer are both turned OFF.

3. Press the Start pad.

4. Press the Favorite Cook and the 0 number pads at the same time for 2 seconds. Error codes are displayed.

5. Press the 0 number pad, to display the latest 5 error codes. But, if the power is interrupted and the oven turns off, the stored error codes are deleted.

6. Press the Clear/Off pad to return to normal display mode.

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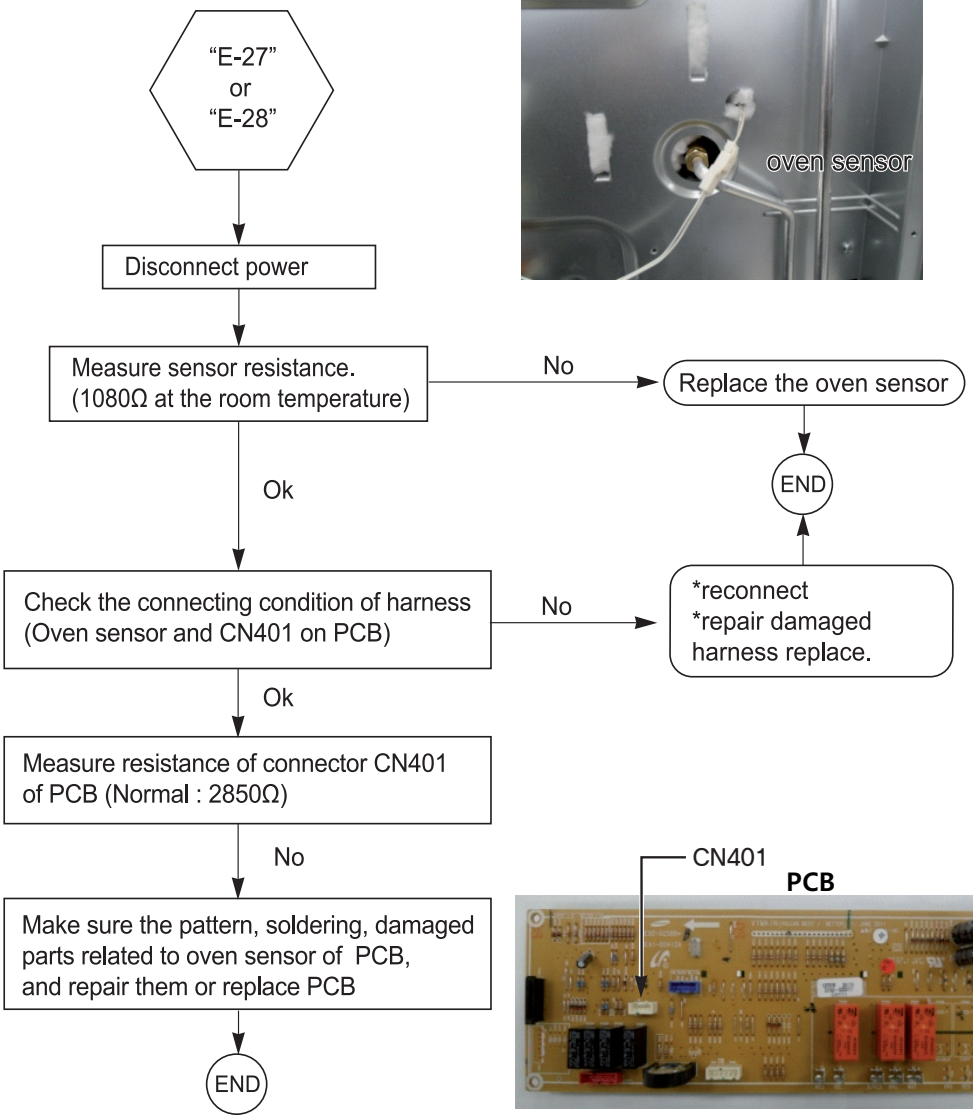
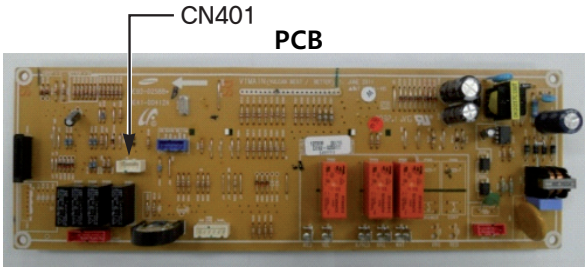
4. Troubleshooting

4-1 Failure Display Codes

Oven sensor error

Failure code	CAUSE	SOLUTION
E-27	Oven Sensor Opened (Over 2950Ω)	**1)** Disconnect **electrical Power to the range. Remove** The **upper rear cover panel.** Measure **the sensor resistance:1080Ω at the room Temperature → If there are any problems, replace the oven temperature sensor.** **2)** If **there is not any problem with oven temperature** sensor, **Please check whether there is a damaged** terminal **or wire on harness.** **3)** Disconnect **the oven sensor connector from the** PCB. **Check resistance of oven sensor connector on** PCB(Normal:2850Ω)
E-28	Oven Sensor Shorted (Under 930Ω)	





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4. Troubleshooting

4-1 Failure Display Codes

Safety error

Failure code	CAUSE	SOLUTION
E-0A	Oven overheating error. (Temperature dose not reach 650°F[343°C] in any cooking function, except Self Clean)	**1)** Disconnect power. Open the rear cover. Disconnect the two harness connectors to the oven temperature sensor resistance:1080Ω at the room temperature → If there are any problems, replace oven temperature sensor. **2)** Check the broil and bake burners to make sure they are lighting and burning properly. **3)** Check whether DLB , Broil, and Bake relay is working normally. **4)** Make sure all harness connections are properly connected and securely fastened to the PCB. **5)** Check the resistance of oven temperature sensor connector on PCB(Normal : 2850Ω)

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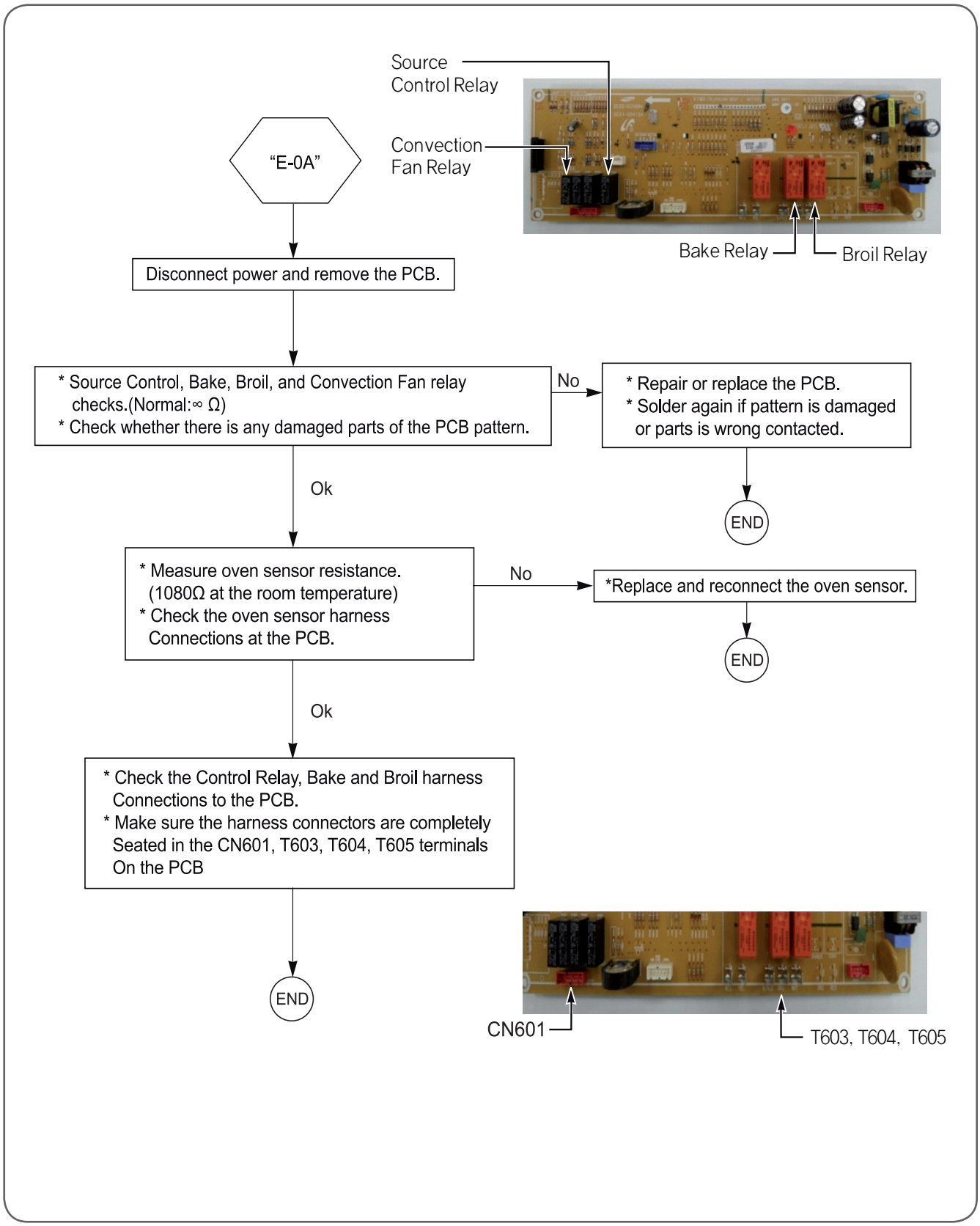
4. Troubleshooting

4-1 Failure Display Codes

Safety error



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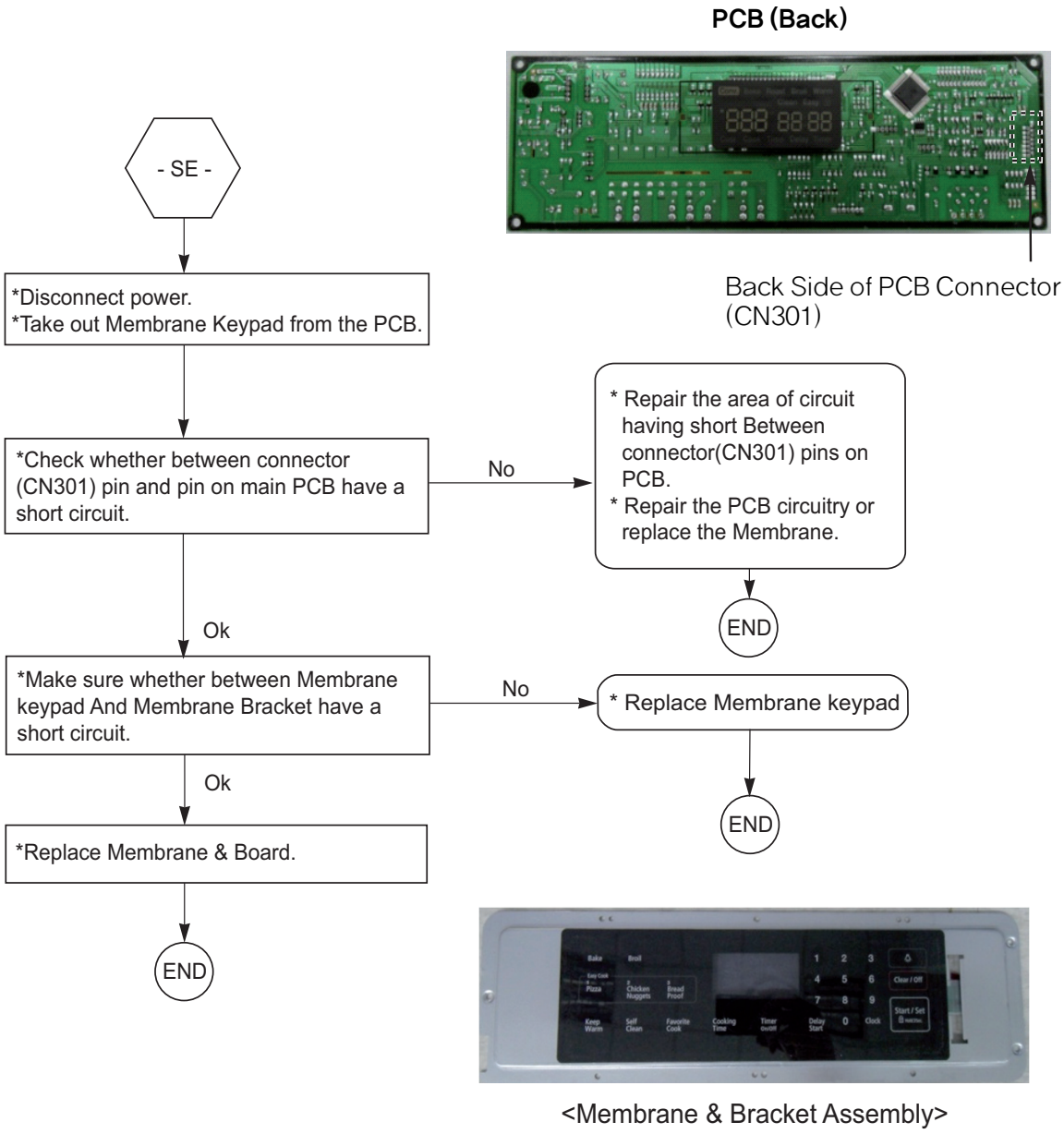
4. Troubleshooting

4-1 Failure Display Codes

Failure code	CAUSE	SOLUTION
-SE-	Shorted Key (Key pad is pressed for 10 minutes.)	**1)** Check the membrane wire harness to make sure it is properly connected with PCB **2)** Disconnect the membrane wire harness. Check the harness, Membrane and PCB for short circuits. **3)** If there is not a problem with connector on main PCB and membrane harness, replace the PCB.



<Membrane & Bracket Assembly>

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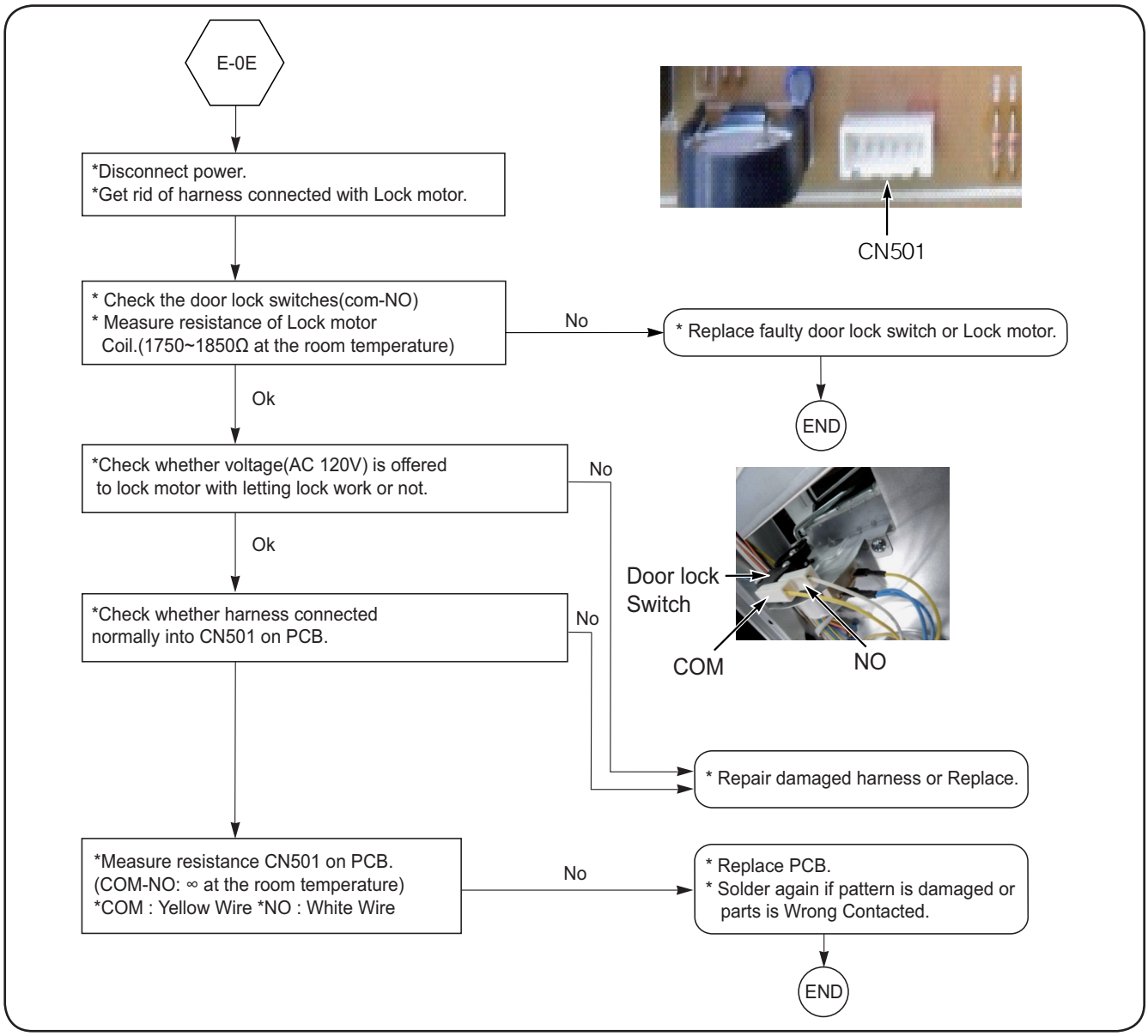
4. Troubleshooting

4-1 Failure Display Codes

Failure code	CAUSE	SOLUTION
E-0E	Door locking error (Door lock in wrong position after 1minutes.)	**1)** Disconnect electrical power to the range. Remove the rear cover panel. Make sure the wiring harness is properly connected to the motorized door lock assembly. **2)** Check motorized door lock assembly for proper operating resistance. **3)** With operating door lockout, measure a voltage of connector on harness which is linked with door lock motor. (Normal :Voltage : AC 120V) **3)** Check the door locking switch to make sure it is working properly.



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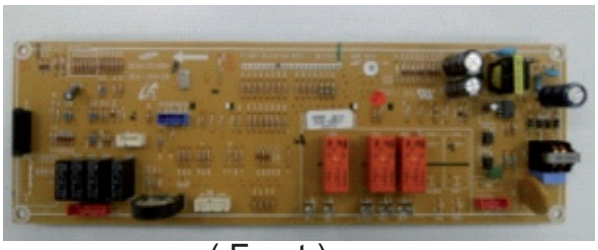
4. Troubleshooting

4-1 Failure Display Codes

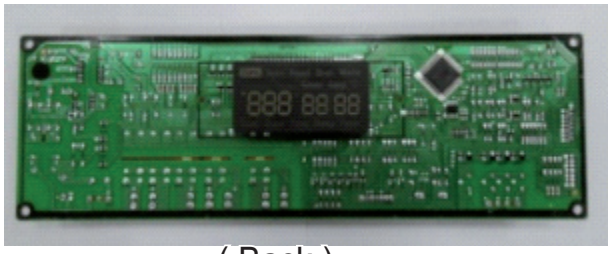
Control PCB Operation

PCB Circuit Boards

PCB



(Front)



(Back)

Membrane & Bracket Assembly

(Front)

(Back)

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4. Troubleshooting

4-1 Failure Display Codes

* Explanation of primary parts on the Membrane Control Panel

NX58F5500SS / NX58F5500SB / NX58F5300SS Membrane Keypad

NX58F5500SW Membrane Keypad

1. Membrane control panel allows user to operate the oven, oven light, and timer operation by touching the membrane panel in the top backguard.

2. The marking on the front of membrane acts as a guide for where the panel should be touched to select and program that function.

If membrane touch control stops working, replace the membrane and membrane bracket.

3. Membrane tail connects the Membrane Keypad to PCB.

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4. Troubleshooting

SYMPTOM	DIAGNOSIS	REMEDY
Oven not operating (No power, No display)	* Measure the input voltage at the plug. (120VAC) * Measure the input voltage at terminal T01 on the PCB .	* Check the circuit breaker or fuse for the range circuit. * Make sure all wires are connected to the PCB.
	* Measure the voltage at the CN01 connector on the PCB. (L1~N:120VAC)	* Repair or replace the loose or disconnected harness.
	* Make sure that the bake, broil, and source control relays on the PCB are working normally. * Make sure the harness connections at the PCB terminals (T02, T03) have not come loose or disconnected.	* Replace the PCB if a relay has been damaged; relay is not working properly; or if the PCB have a crack in it. * Tighten or reconnect the PCB harness connections. * After confirming the harness has been connected properly to the PCB, take the following action: - Repair of replace the harness. - Replace the PCB.
	* Measure the resistance between both ends of the oven temperature sensor. (normal : 0 ohms) * Make sure the harness connections at the PCB connector CN04 has not come loose or disconnected.	* Replace the oven temperature sensor. * Repair or replace the harness. * If problem still exists after confirming the oven temperature sensor and harness are working and connected properly, replace the PCB.
Oven temperature rises too slowly.	* "E-08" will show on the display if the oven fails to reach 125˚F(52˚C) within 10 minute in a room temperature condition.	* Measure the oven temperature sensor resistance: (1080Ω at the room temperature). Replace a faulty oven temperature sensor.
	* Make sure the harness connections at the PCB terminals (T02, T03) have not come loose or disconnected.	* Repair or replace the harness.
	* Make sure the broil and bake burners have been adjusted properly. * Make sure the oven burner orifices are sized properly for the type of gas being used.	* Open or close the air shutter at the base of the burners to optimize the flame pattern. * Replace with properly sized orifices: **Burner Orifice** / **NG mm** / **LP mm** Broil 1.64 1.02 Bake 1.90 1.15 **NOTE:** High-altitude orifice kits are available.
	* Make sure that the bake, broil, and source control relays on the PCB are working normally.	* Repair or replace the faulty relay. * Make sure all harness connections are properly connected. * Replace the PCB.

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SYMPTOM	DIAGNOSIS	REMEDY
Oven temperature rises too fast.	* The oven temperature exceeds 400˚F(202˚C) within 10 minutes of room temperature operation.	* Repair or replace the faulty broil or bake relay.
	* Make sure the harness is wired correctly and does not have a short circuit in it.	* Repair or replace the harness.
	* Make sure the oven burner orifices are sized properly for the type of gas being used.	* Replace with properly sized orifices: **Burner Orifice** / **NG mm** / **LP mm** Broil 1.64 1.02 Bake 1.90 1.15 **NOTE:** High-altitude orifice kits are available. * Replace the PCB.
Oven is overheating in all cooking modes.	* "E-0A" will show on the display if the oven temperature reaches 650°F (343°C) in any cooking function, except self clean.	* Check the source control relay (RY01) and replace if it is not working properly. * Make sure all harness wires are securely fastened. * Check the resistance of oven temperature sensor connector on the PCB. (Normal : 2850Ω) * Replace the PCB.
Membrane control keypads are not working properly.	* Make sure the door lock feature is not turned on.	* Unlock the controls by pressing and holding the lock key for 3 or more seconds.
	* Check to see if the sabbath function has been turned on.	* Press and hold the Sabbath pad for at least 3 seconds. The display will show the time of day when the function is turned off.
	* Check the membrane control harness and connectors (CN08) on the PCB and membrane control panel.	* Reconnect securely or replace damaged membrane control harness.
	* Check connector (CN08) and/or the PCB for damage. * Check the membrane control panel for damage.	* Replace the PCB assembly. (PCB and membrane control panel.)

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SYMPTOM	DIAGNOSIS	REMEDY
Oven lamp is not working.	* Make sure the door lockout feature is not turned on.	* Unlock the controls by pressing and holding the lock key for 3 or more seconds.
	* Check for a burned out bulb.	* Replace with a 40 watt appliance bulb.
	* Check the harness connections, the oven lamp relay (RY06), and the source control relay (RY01).	* Repair or replace loose or disconnected harness. * Replace any malfunctioning relays.
	* Measure the resistance across the light ballast/socket terminals. (Normal : ∞)	* Replace the light ballast/socket. * Replace the PCB.
The oven smells and/or smokes when it is initially started.	* This is normal.	* The insulation around the oven will give off a slight odor until the adhesive has cured. This should go away after the first couple of oven uses. * The oven is designed to burn off dirt and/or foreign substances. * If the oven is dirty, run a self-cleaning cycle. (See page 53 in the "User Manual".) A ventilation system should be used while the oven is self cleaning.
The LED display is dim or not visible.	* Check the membrane control harness and connectors (CN08) on the PCB and membrane control panel. * LED display is inferior.	* Reconnect securely or replace a damaged membrane control harness. * Replace the PCB assembly. (PCB and membrane control panel.)
The buzzer does not beep when a keypad is touched.	* Check to see if the sabbath function has been turned on. * The buzzer does not work on the PCB.	* Press and hold the Sabbath pad for at least 3 seconds. The display will show the time of day when the function is turned off. * Replace the PCB.

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SYMPTOM	DIAGNOSIS	REMEDY
None of the cooktop burners will light.	* There is no electrical power to the range.	* Plug in the power cord and/or reset the circuit breaker for the range.
	* The gas supply valve to the range is closed.	* Open the gas supply valve.
	* Check the terminals on the spark module for voltage.	* Replace the faulty spark module.
	* Check for crimped or broken gas line between the pressure gas regulator and the surface burner control manifold.	* Replace the damaged gas line.
	* Gas pressure regulator switch is closed.	* Replace the gas pressure regulator.
One cooktop burner does not light.	* Check the harness connections at the spark module.	* Reconnect loose conection or replace damaged harness.
	* Check the spark module.	* Disconnect the spark module terminal for the nonworking burner. If no voltage is measured, replace the spark module.
	* Check the electrode for that burner.	* Disconnect the electrode and check whether electrode wire or tip is broken. Replace the faulty electrode.
	* Check for a dirty surface burner orifice.	* Clean and/or replace the surface burner orifice. **NOTE:** Replacement orifice should always be the same size as removed.
	* Check for crimped or broken gas lines.	* Replace damaged gas lines.
	* Faulty surface burner control	* Each surface burner control is an integral part of the surface burner control manifold. Replace the manifold.
All surface burners will light, but don't stay lit.	* Check for crimped gas line between the pressure gas regulator and the surface burner control manifold.	* Replace the damaged gas line.
	* Faulty gas pressure regulator.	* Replace the gas pressure regulator.
One cooktop burner lights, but doesn't stay lit.	* Check for a dirty surface burner orifice.	* Clean and/or replace the surface burner orifice. **NOTE:** Replacement orifice should always be the same size as removed.
	* Check for a crimped gas line.	* Replace the crimped gas line.
	* Faulty surface burner control.	* Each surface burner control is an integral part of the surface burner control manifold. Replace the manifold.

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<table>
<tr><th>SYMPTOM</th><th>DIAGNOSIS</th><th>REMEDY</th></tr>
<tr><td>Cooktop burner flames are soft blue or have yellow tips.</td><td>* This is normal.</td><td>* Soft blue flames are normal flames for NG operation.
* Soft blue flames with yellow tips are normal flames for LP operation.</td></tr>
<tr><td rowspan="3">Cooktop burner flames are mostly yellow.</td><td>* Check for proper sized orifices:
<table>
<tr><th colspan="4">NX58F5500SS / NX58F5500SB / NX58F5500SW</th></tr>
<tr><td colspan="2"></td><td>NG</td><td>LP</td></tr>
<tr><td>RF</td><td>LIGHT GRN</td><td>1.92</td><td>1.06</td></tr>
<tr><td>LF</td><td>GRN</td><td>1.60</td><td>0.98</td></tr>
<tr><td>CTR</td><td>BLUE</td><td>1.38</td><td>0.83</td></tr>
<tr><td>RR</td><td>PINK</td><td>1.01</td><td>0.62</td></tr>
<tr><td>LR</td><td>PUR</td><td>1.40</td><td>0.83</td></tr>
</table>
<table>
<tr><th colspan="4">NX58F5300SS</th></tr>
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<tr><td>RR</td><td>PINK</td><td>1.01</td><td>0.62</td></tr>
<tr><td>LR</td><td>PUR</td><td>1.40</td><td>0.83</td></tr>
</table>
NOTE: High-altitude orifice kits are available.</td><td>* Replace any wrong sized orifices.</td></tr>
<tr><td>* Check for crimped or cracked gas line between the pressure gas regulator and the surface burner control manifold.</td><td>* Replace the damaged gas line.</td></tr>
<tr><td>* Faulty gas pressure regulator.</td><td>* Replace the gas pressure regulator.</td></tr>
</table>

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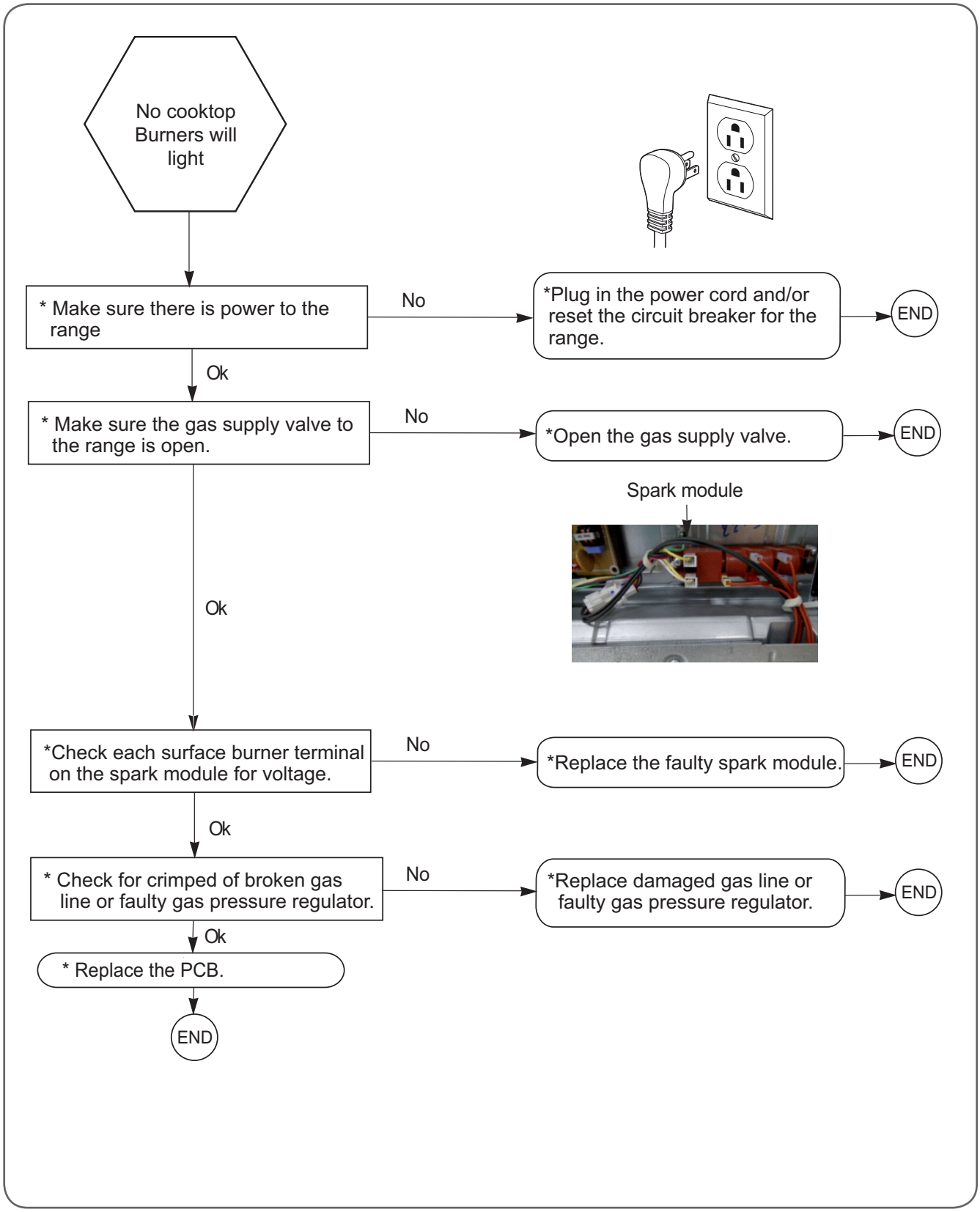
4-2 Cooktop Malfunction

No cooktop burners will light (Electrical)



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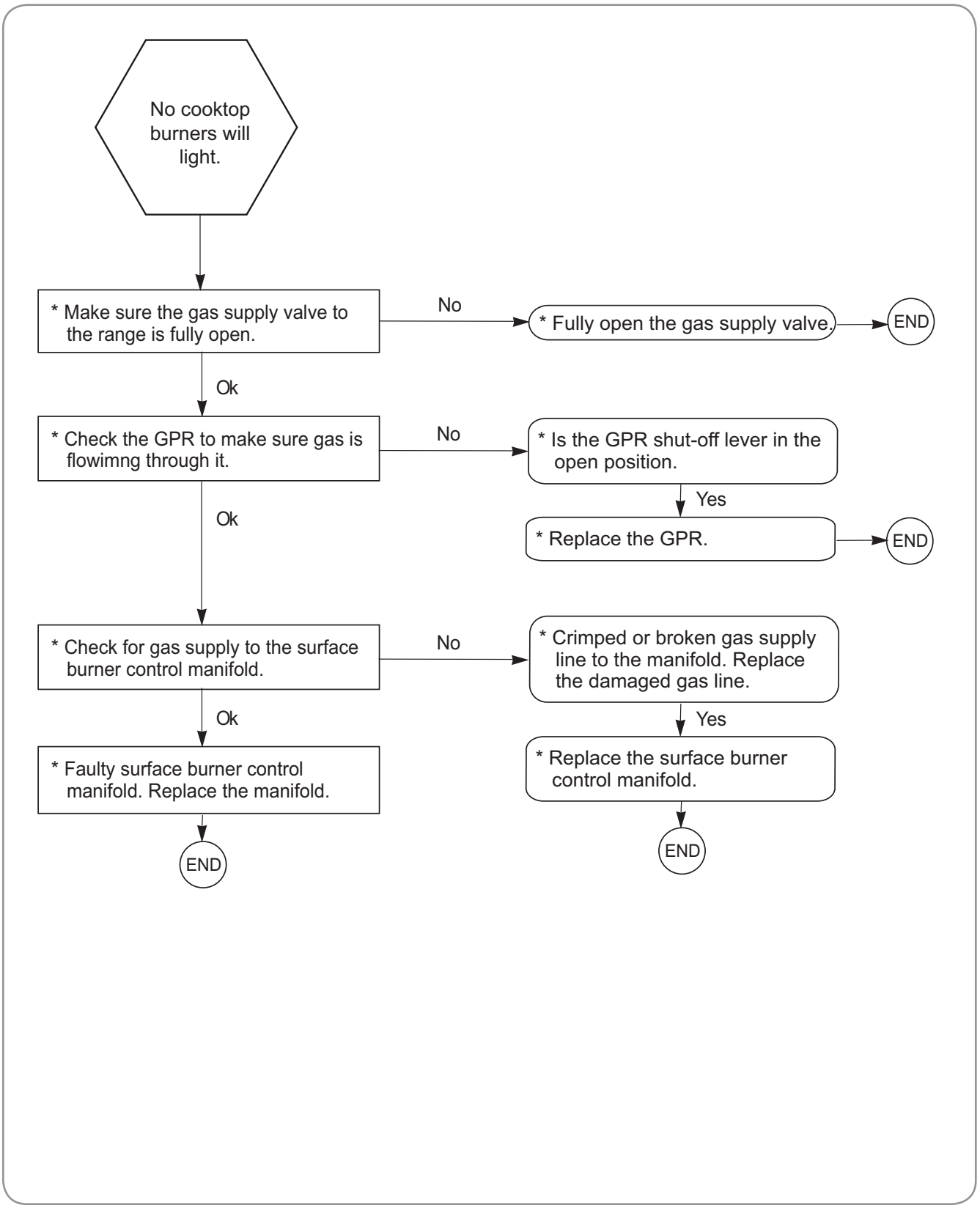
4-2 Cooktop Malfunction

No cooktop burners will light (Gas)



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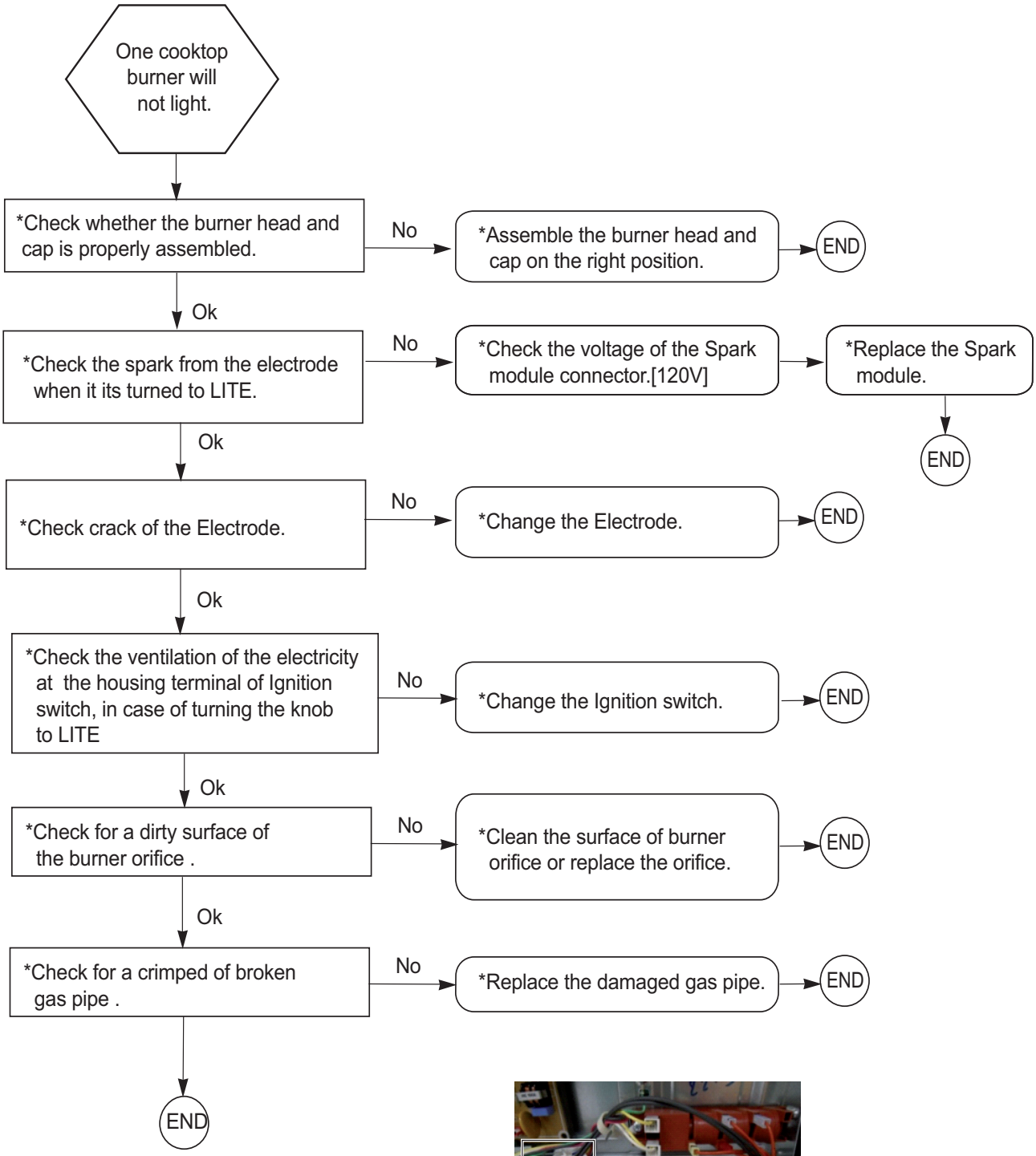
4-2 Cooktop Malfunction

One cooktop burners will light (Electrical)



Spark module connector

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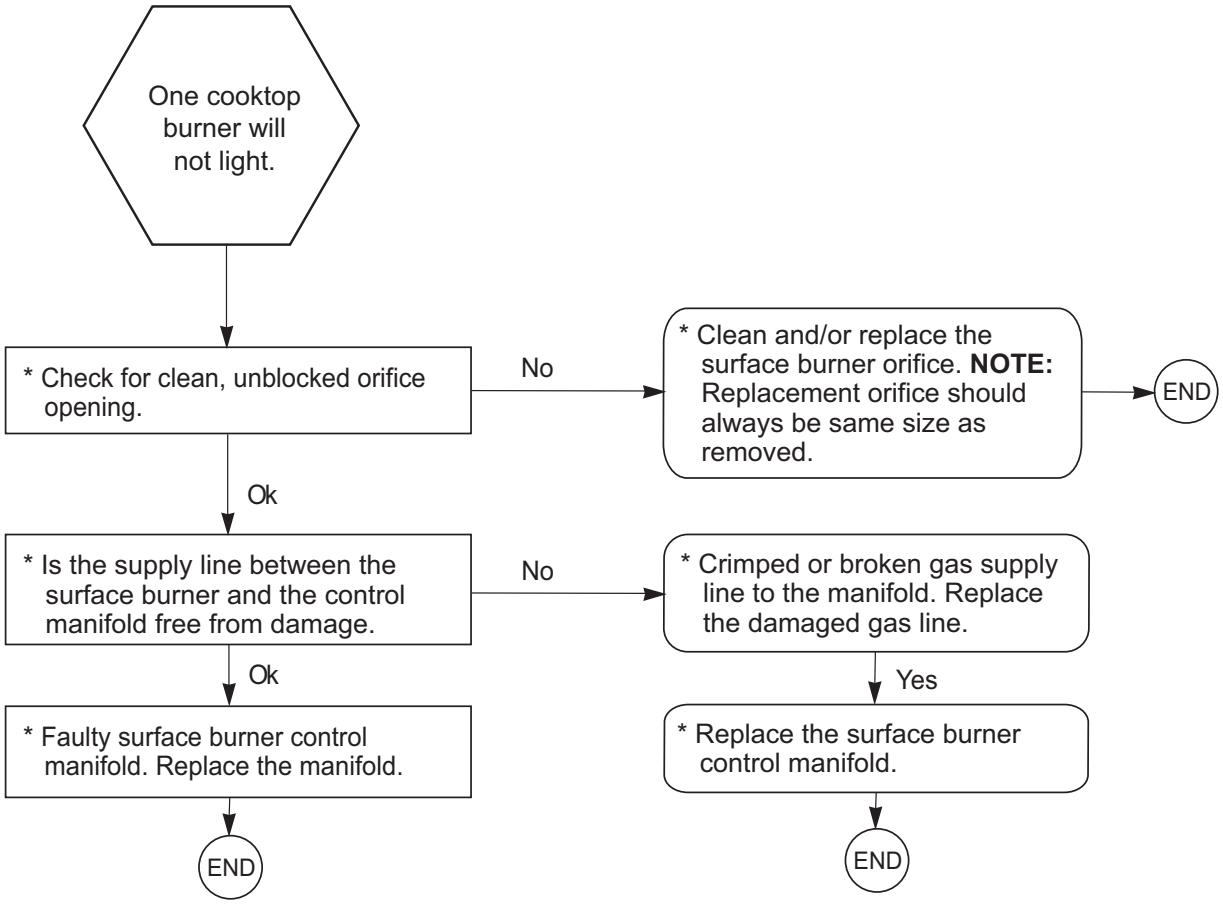
4-2 Cooktop Malfunction

One cooktop burners will light (Gas)



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4-2 Cooktop Malfunction

The flame looks abnormal (Gas)

Yellow tip / Lift flame

BURNER ORIFICE SIZES AND OUTPUT RATINGS (Natural Gas 5 in WCP)		
Burner location	BTU Rate	Orifice Size [mm]
RF[1]	17,000	1.92
RF[2]	16,000	1.92
LF	12,000	1.60
RR	5,000	1.01
LR	9,500	1.40
CTR[1]	9,500	1.38
CTR[2]	9,500	1.40
BAKE	18,000	1.90
BROIL	13,500	1.64

BURNER ORIFICE SIZES AND OUTPUT RATINGS (LP Gas [Propane] 10 in WCP)		
Burner location	BTU Rate	Orifice Size [mm]
RF	12,500	1.06
LF	10,000	0.98
RR	4,000	0.62
LR	7,500	0.83
CTR[1]	7,500	0.83
CTR[2]	7,500	0.83
BAKE	15,000	1.15
BROIL	11,500	1.02

1. MODEL NX58F5500SS / NX58F5500SB / NX58F5300SS
2. MODEL NX58F5300SS

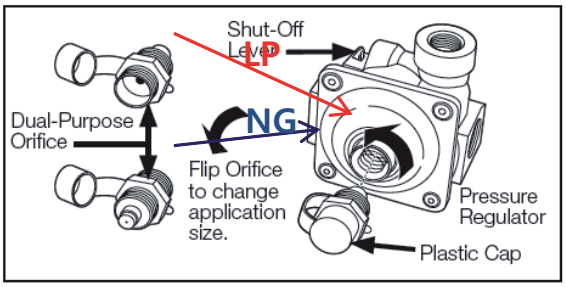
*Check whether the burner heads and caps are properly assembled.
- No → *Place the burner heads and caps properly. → END
- Ok ↓

*Check the orifice nozzle diameter. [NG / LP]
- No → *Replace the orifice nozzle. → END
- Ok ↓

*Check the direction of the orifice at the GPR.
- No → *Apply the right direction of the orifice. → END
- Ok ↓

*Check the air shutter opening [Broil / Bake burner]
- No → *Adjust the air shutter opening. → END
- Ok ↓

END



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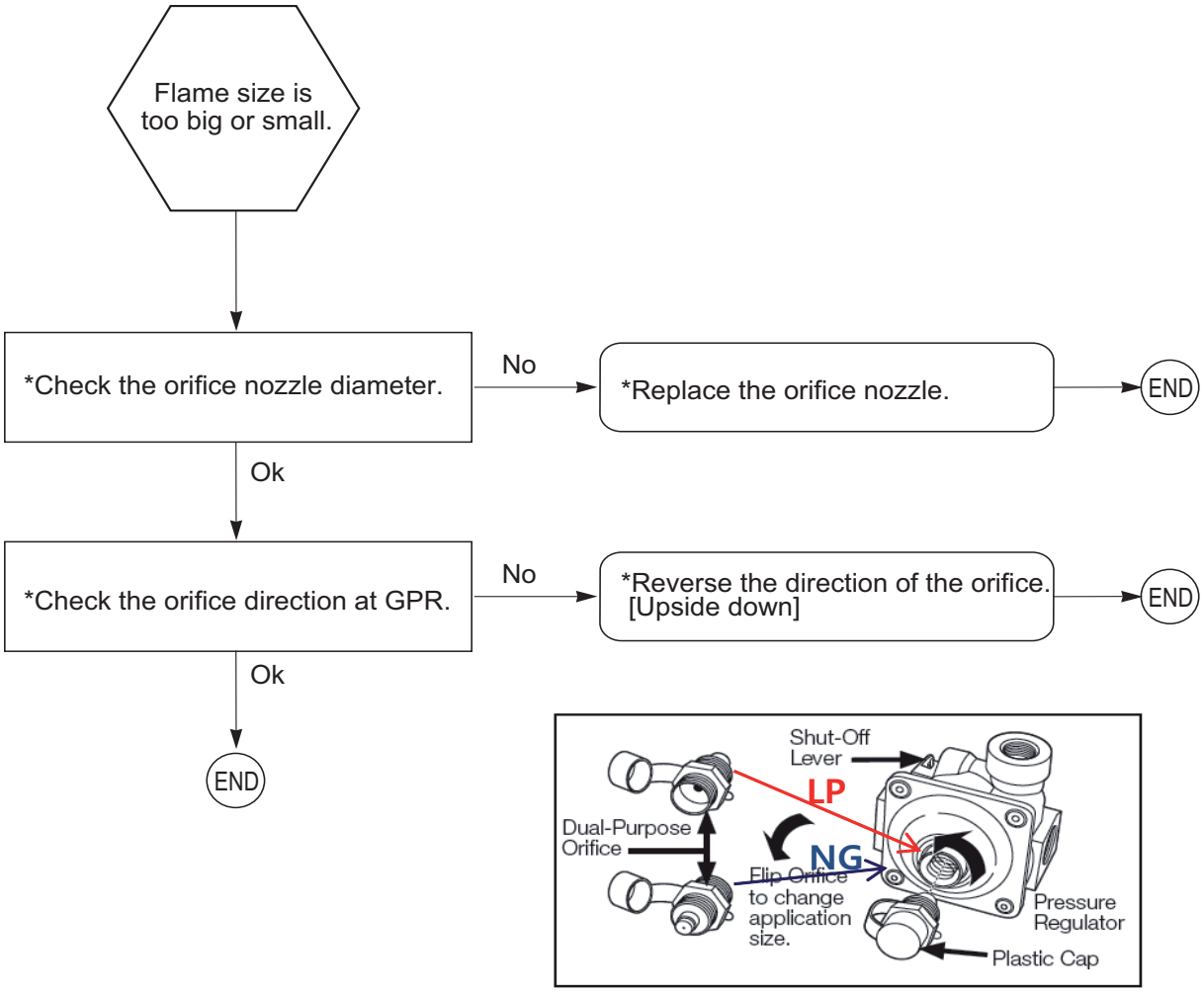
4-2 Cooktop Malfunction

Flame size is too big or small(Gas)



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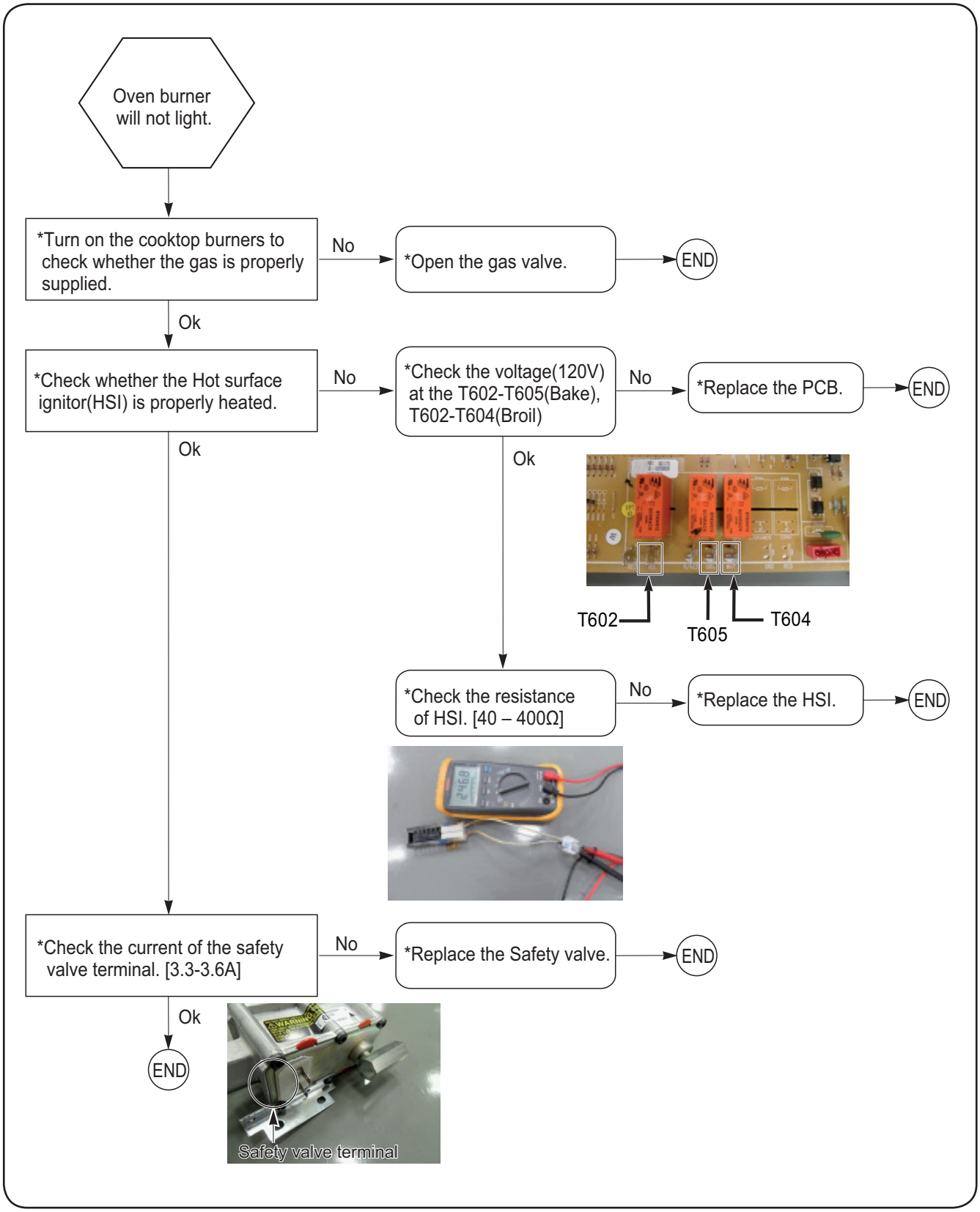
4-3 Oven Malfunction

Oven burner will not light [Broil / Bake burner] (Electrical)



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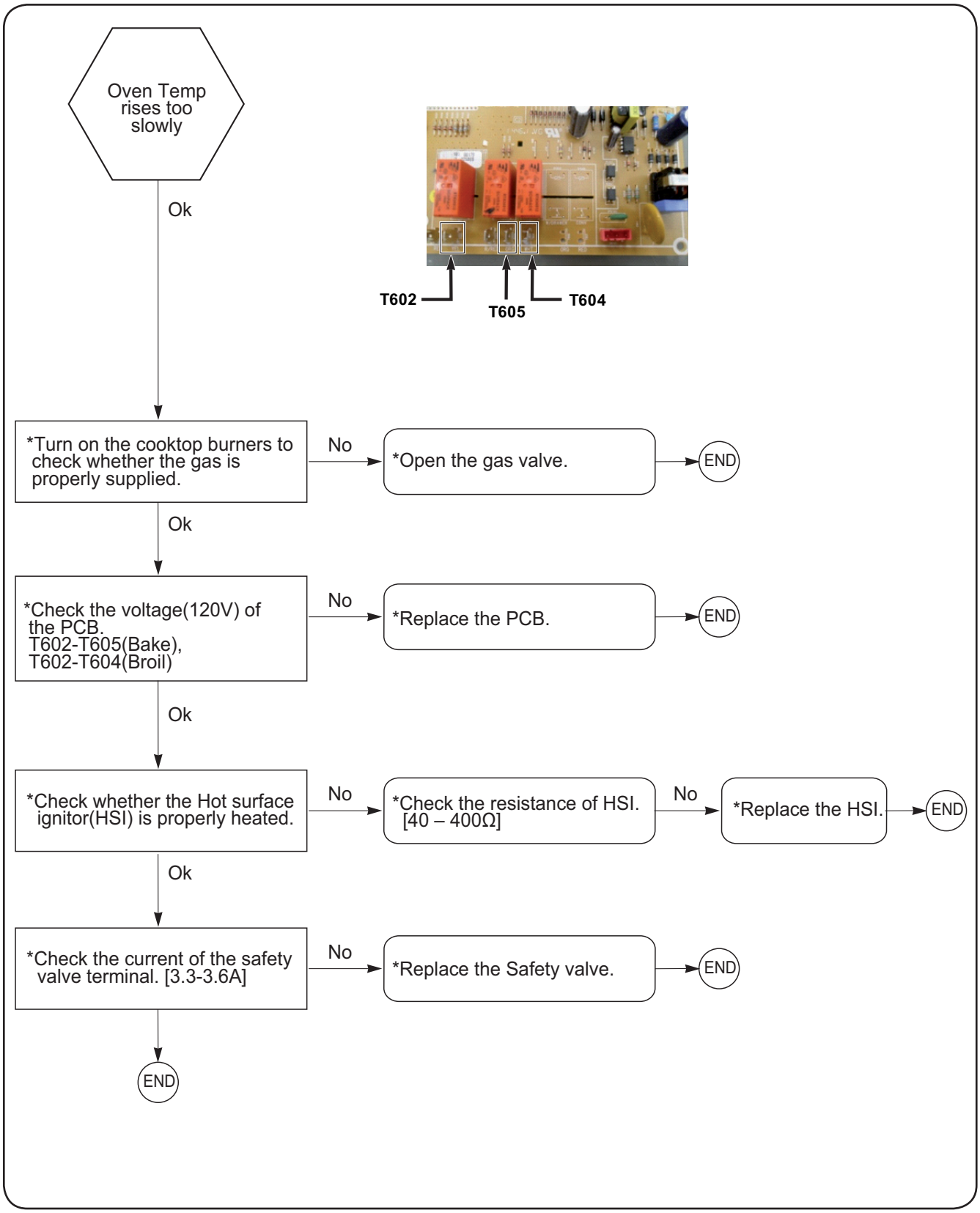
4-3 Oven Malfunction

Oven temperature rises too slowly (Electrical)



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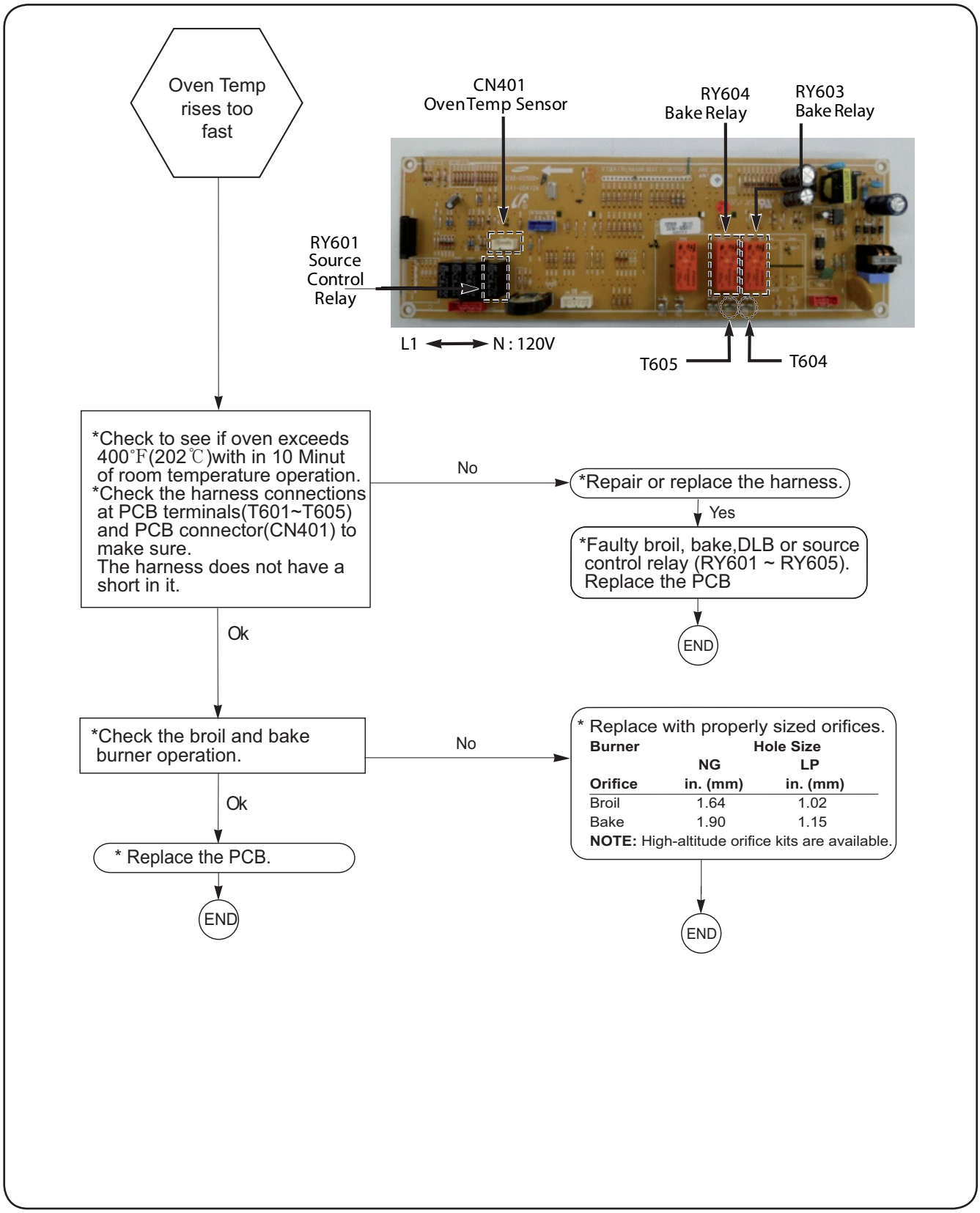
4-3 Oven Malfunction

Oven temperature rises too fast (Electrical)



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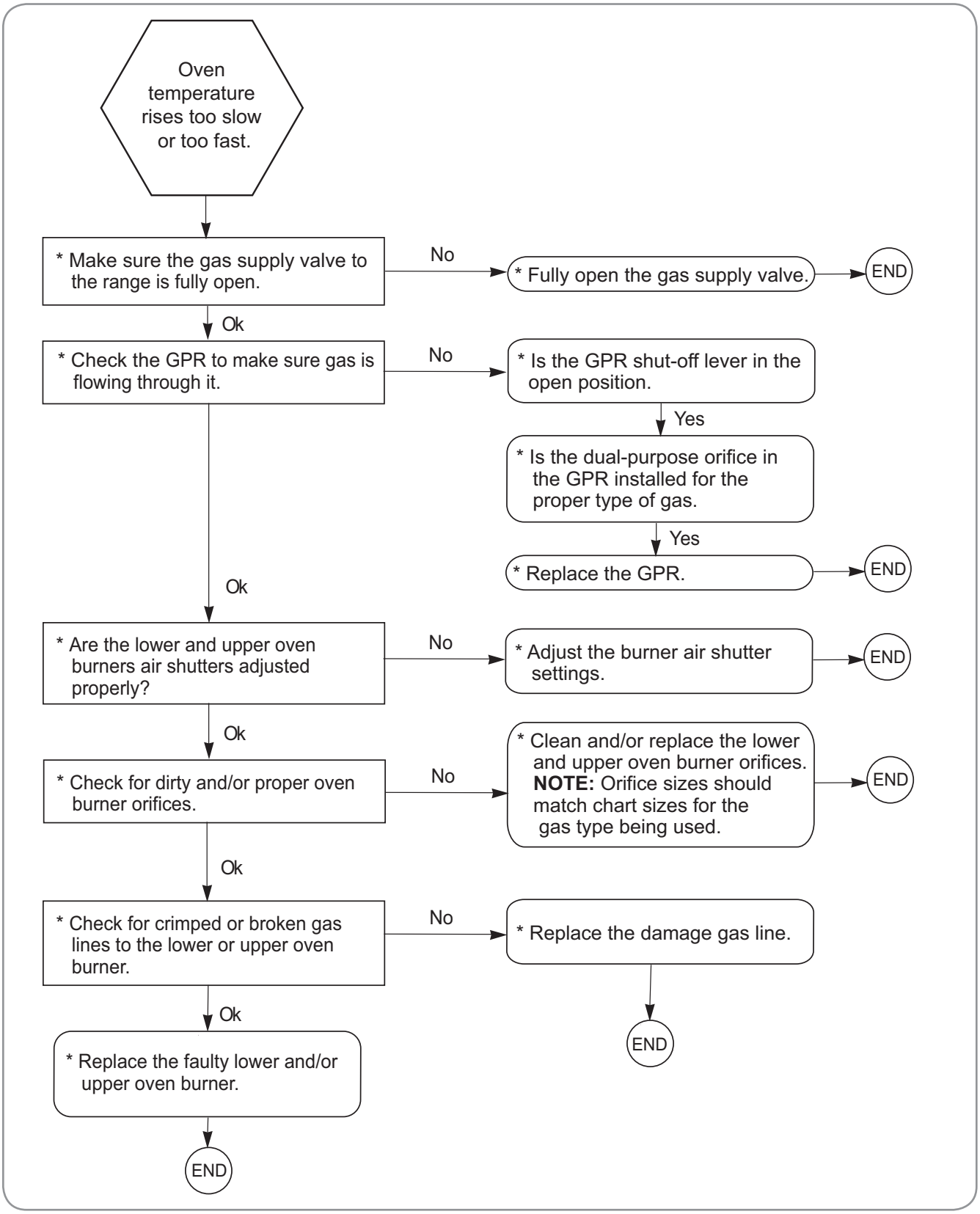
4-3 Oven Malfunction

Oven temperature rises too slow or too fast (Gas)



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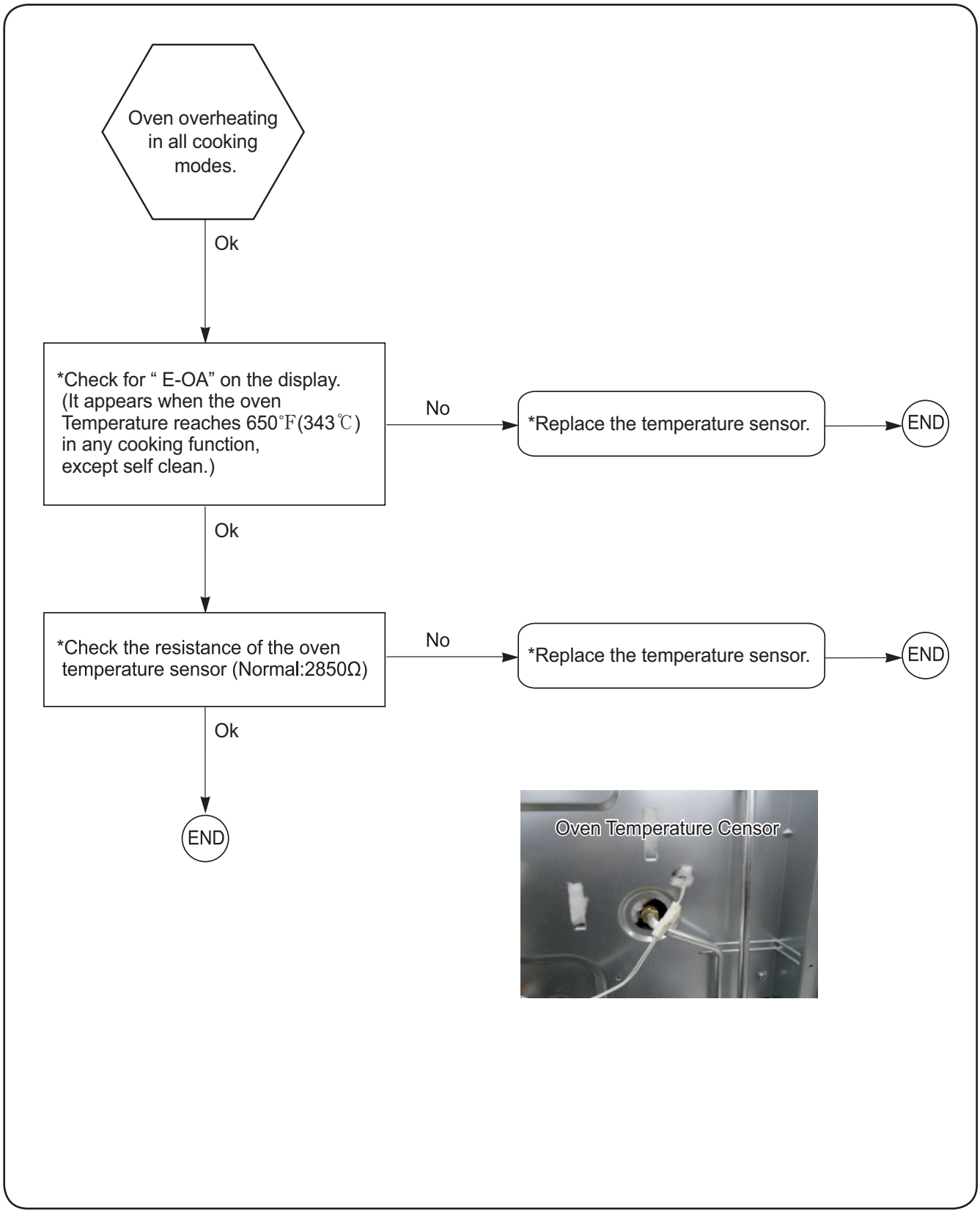
4-3 Oven Malfunction

Oven overheating in all cooking modes (Electrical)



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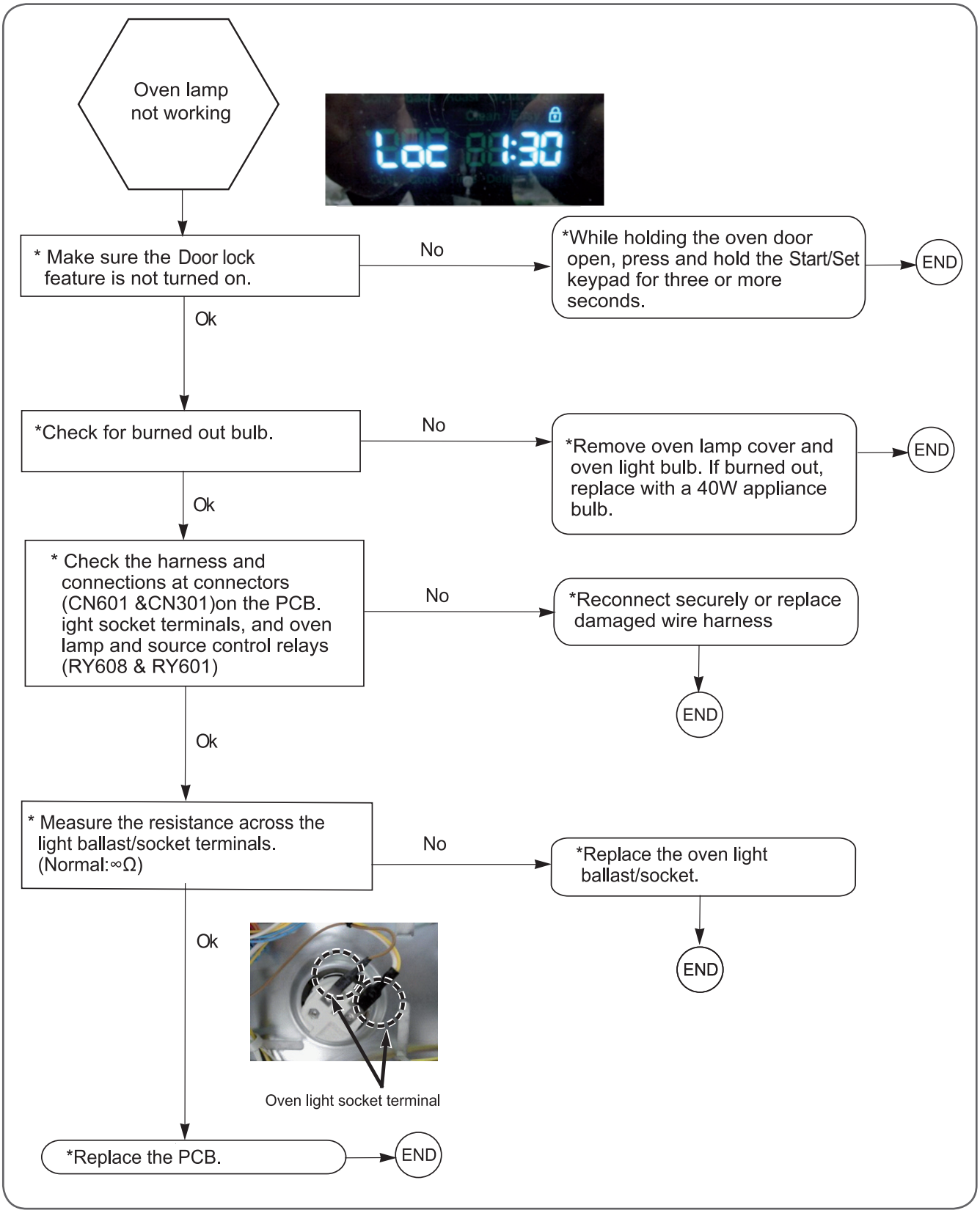
4-3 Oven Malfunction

Oven lamp not working (Electrical)



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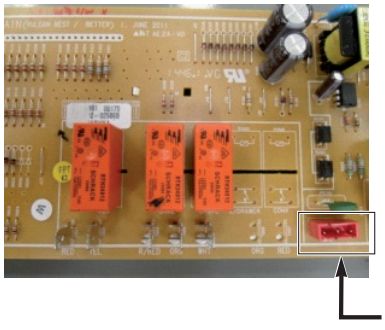
4-4 Control Malfunction

No display (Electrical)



No display

*Make sure that power cord is connected.

No → *Insert the power cord. → END

Ok

*Check the voltage of the Power cord connector housing . [120V].

No → *Replace the Power cord. → END

Ok

*Check the voltage of the Wire harness A housing [CN101].

No → *Replace the Wire harness A. → END

Ok

*Check the voltage of the PCB connector [CN101].

No → *Replace the PCB. → END

Ok

END

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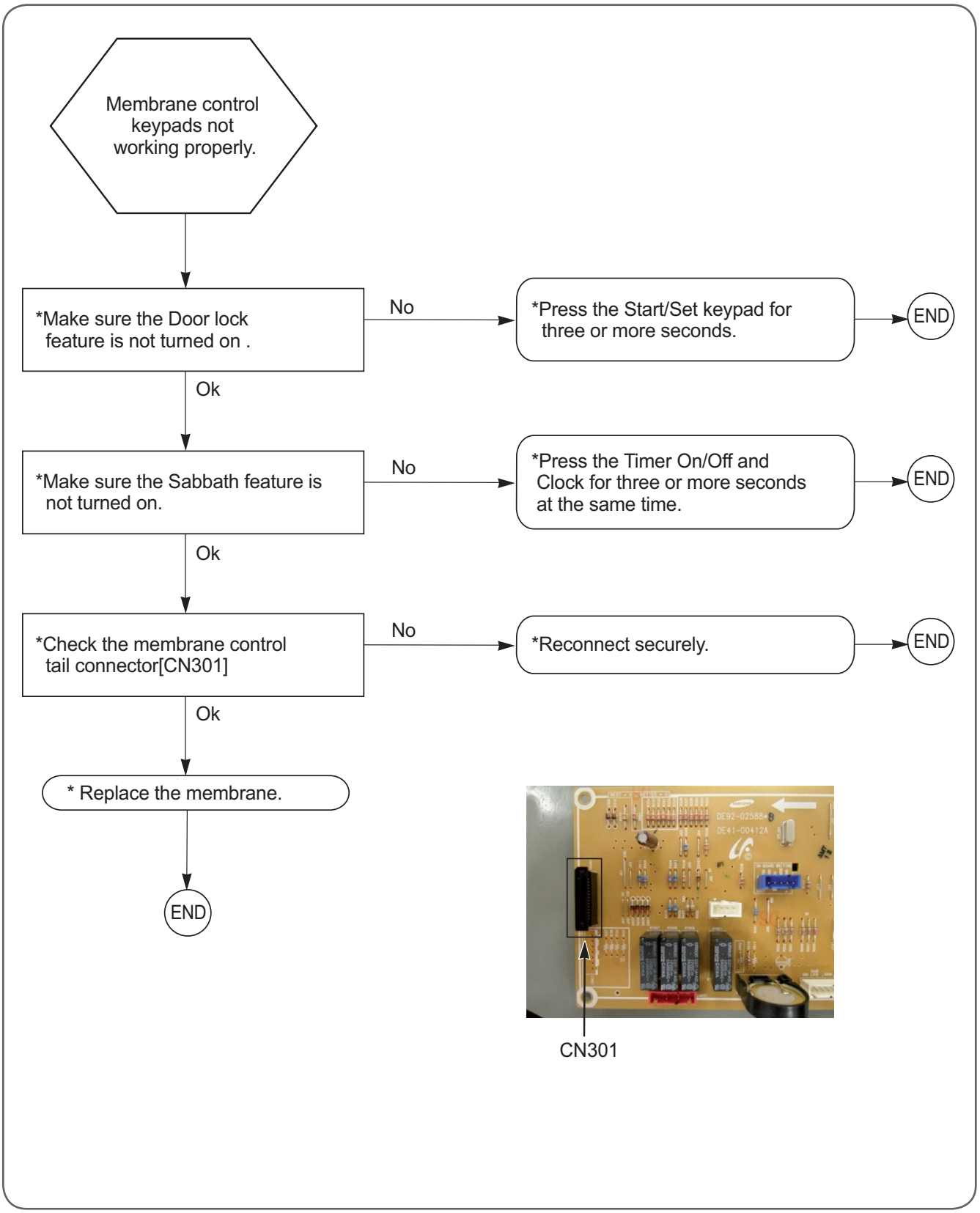
4-4 Control Malfunction

Membrane keypads not working properly (Electrical)



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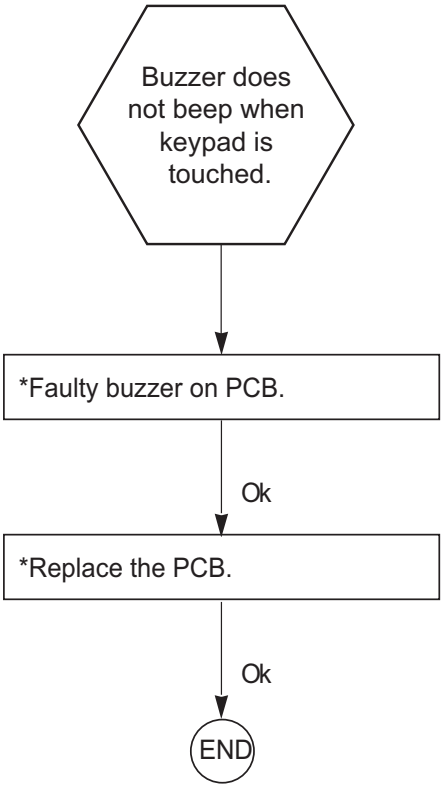
4-4 Control Malfunction

Buzzer does not beep when keypad is touched (Electrical)



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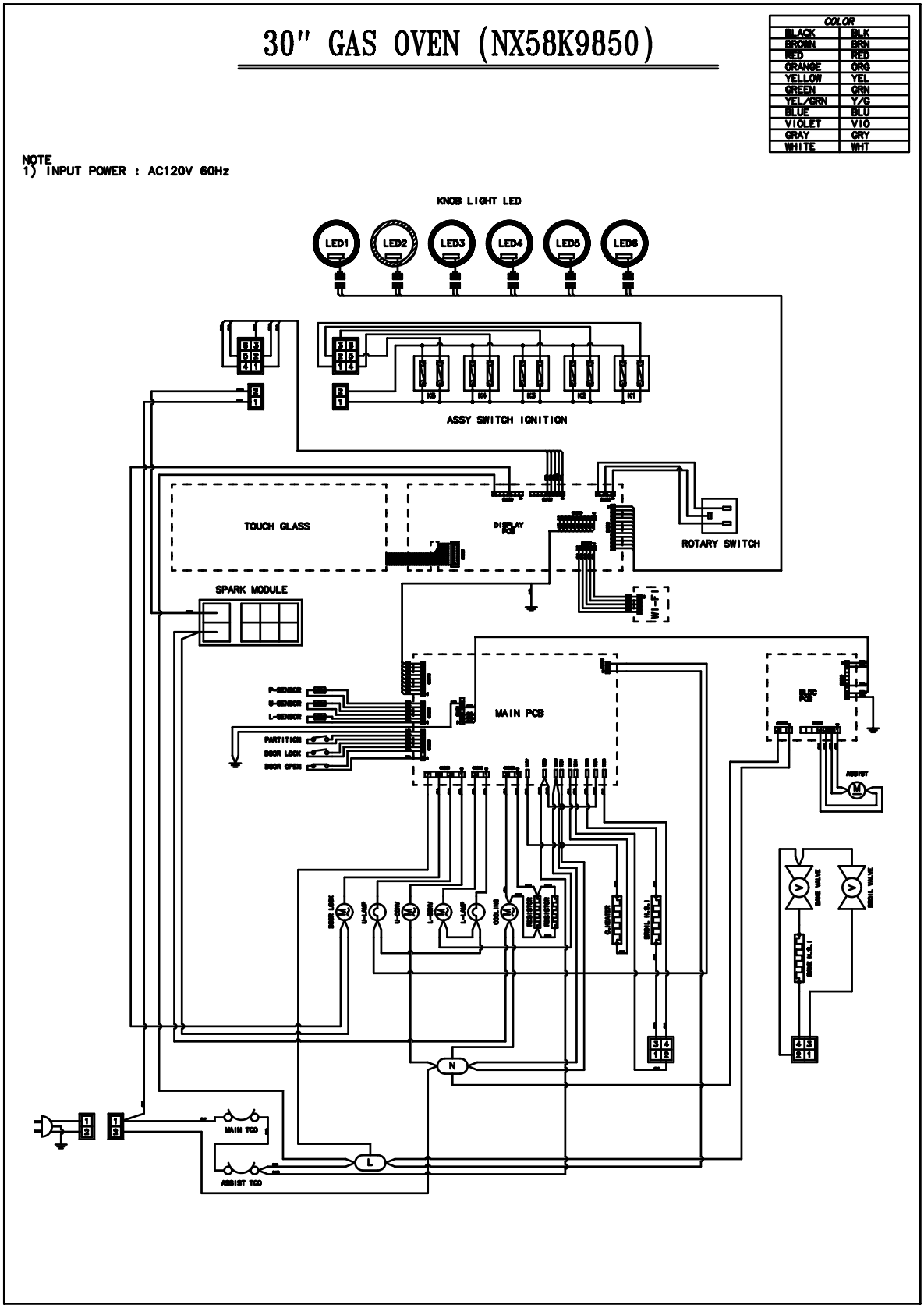
5. Wiring Diagram

5-1 Wiring Diagram



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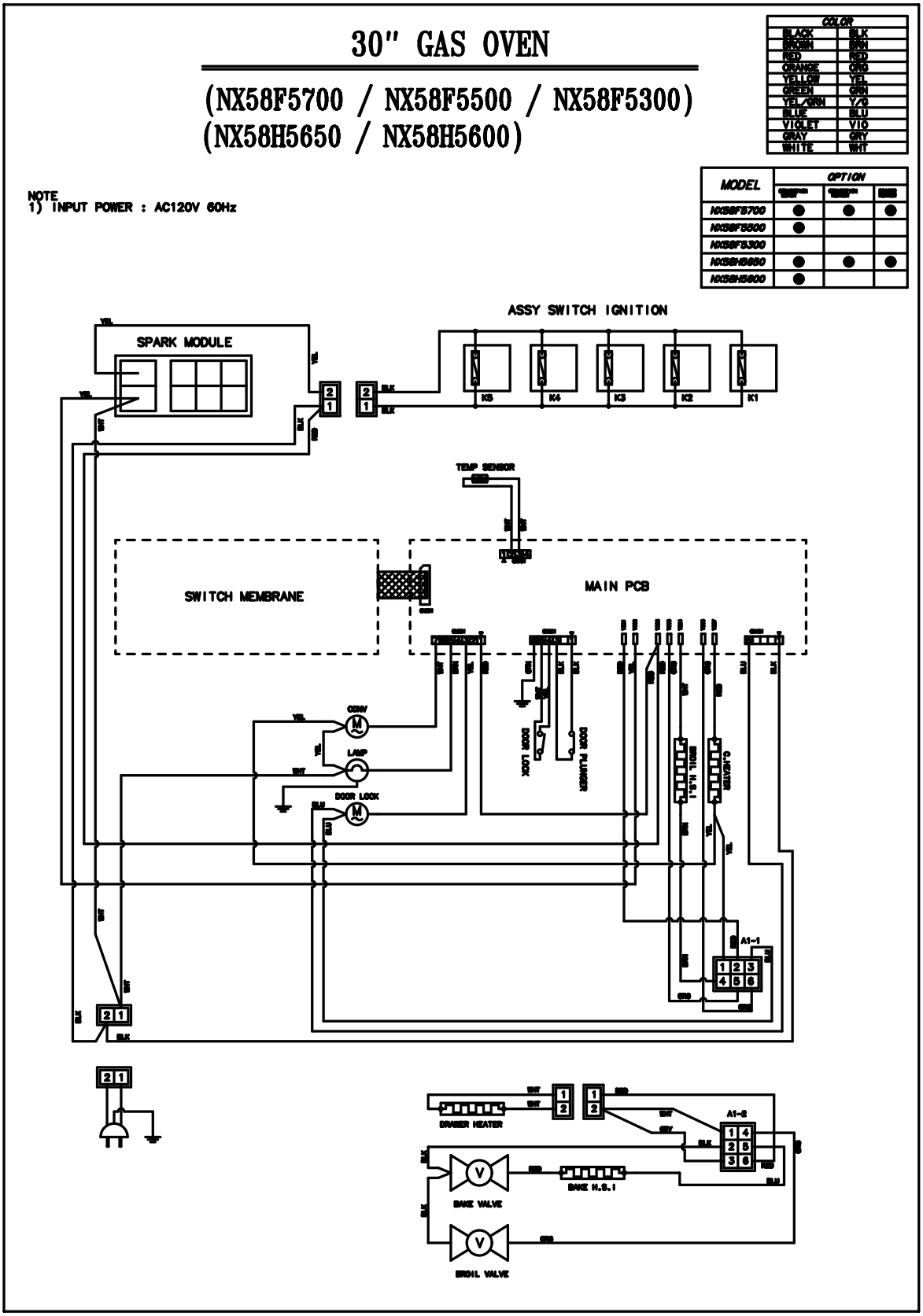
5. Wiring Diagram

5-1 Wiring Diagram



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6. Schematic Diagram

6-1 Schematic Diagram
NX58F5500SS, NX58F5500SB, NX58F5500SW, NX58F5300SS

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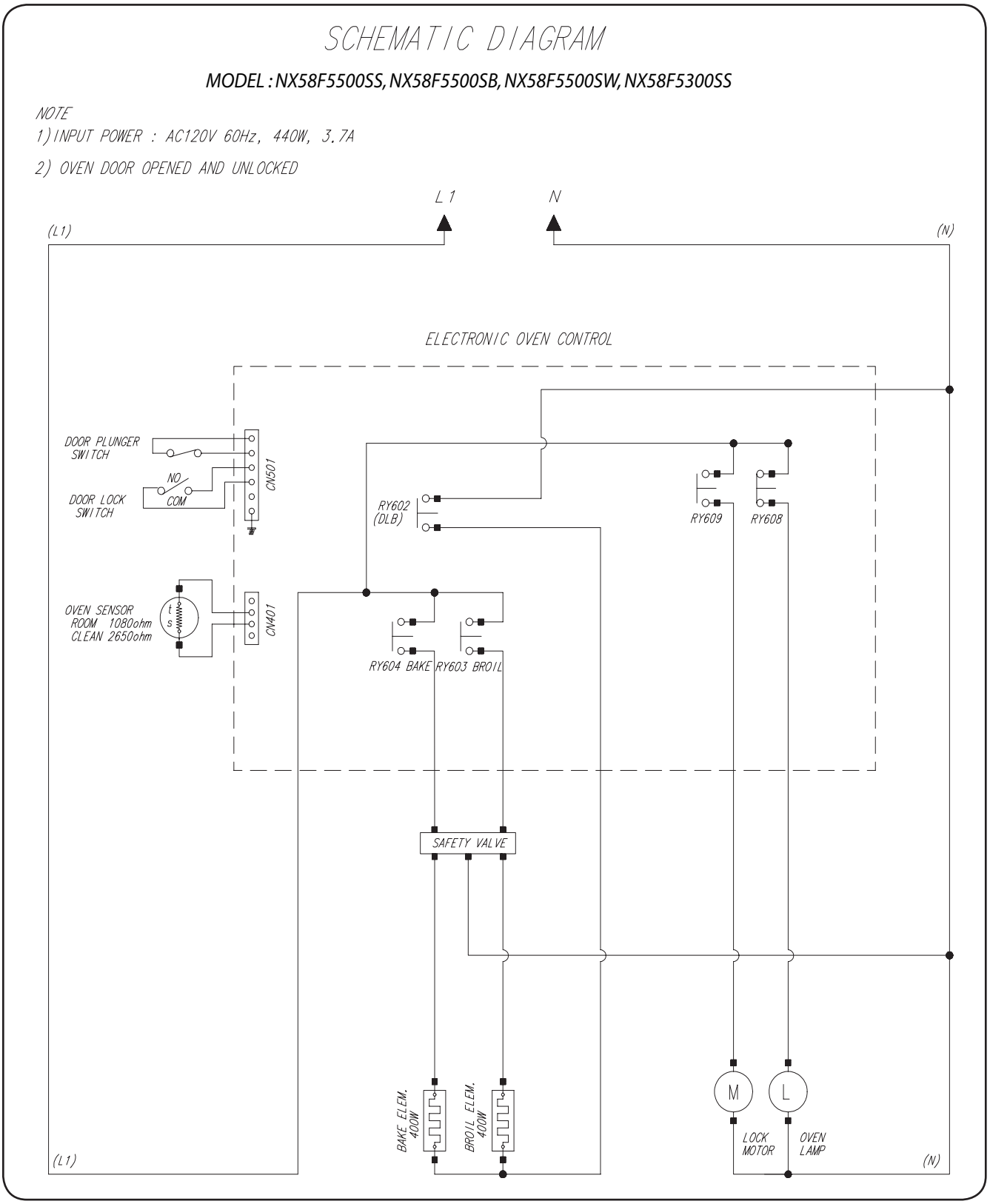

7-1 PCB Diagram
FX510BGS / NX583G0VBSR / NX58F5500SS / NX58F5500SB / NX58F5500SW / NX58F5300SS (Main)

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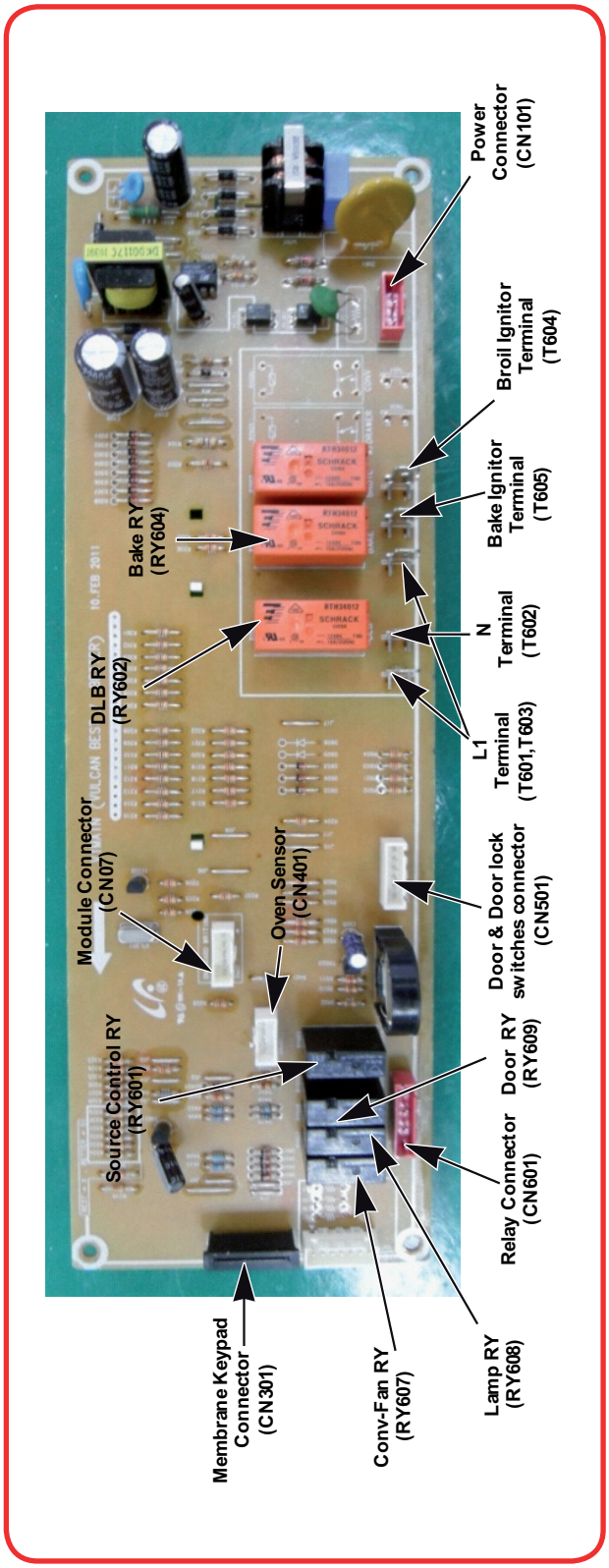

NO.	PART NO.	PART NAME	FUNCTION AND RULE
1	CN101	Power Connector	This is the connector that supplies 120VAC(L1~N)
2	CN301	Membrane Keypad Connector	This is the connector that connects the Membrane tail to the PCB.
3	CN401	Oven Sensor	This is the connector that connects the oven temperature sensor to the PCB.
4	CN501	Door & Door lock switches connector	This is the connector that connects the door switch with the door lock switch.
5	CN601	Relay Connector	This is the connector that connects the control relay with the oven lamp, and the door lock motor.
6	RY601	Source Control RY	This is the relay that is the control source of DLB, Bake, Broil relays.
7	RY602	DLB RY	Circuit is designed to have bake, broil relay worked after DLB relay is being worked by Double line break.
8	RY603	Broil RY	This is the relay that controls the broil ignitor operation.
9	RY604	Bake RY	This is the relay that controls the bake ignitor operation.
10	RY607	Conv-Fan RY	This is the relay that controls the operation of the convection fan motors.
11	RY608	Lamp RY	This is the relay that controls the oven lamp operation
12	RY609	Door RY	This is the relay that controls the operation of door lock motor.
13	T601	L1 Terminal	This is terminal that supplies L1 Voltage(120VAC) to PCB
14	T602	N Terminal	This is terminal that supplies N Voltage to PCB
15	T603	L1 Terminal	This is terminal that supplies L1 Voltage(120VAC) to PCB
16	T604	Broil Ignitor Terminal	This is terminal connects the broil ignitor to the broil relay.
17	T605	Bake Ignitor Terminal	This is terminal connects the bake ignitor to the bake relay.

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